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(54) Title: ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS (GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH ANTIGENIC PEPTIDES

(57) Abstract: The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known antibodies.

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**ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS
(GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH
ANTIGENIC PEPTIDES**

5 CROSS-REFERENCE TO RELATED APPLICATIONS

[1] The present application claims priority from United States provisional patent application No. 60/257,144, filed December 19, 2000 and presently pending.

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[2] The following is a Table of Contents to assist review of the present application:

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[3]

BACKGROUND

[4] G protein-coupled receptors (GPCRs) are a large group of proteins that transmit signals across cell membranes. In general terms, GPCRs function somewhat like doorbells.
15 When a molecule outside the cell contacts the GPCR (pushes the doorbell), the GPCR changes its shape and activates "G proteins" inside the cell (similar to the doorbell causing the bell to ring inside the house, which in turn causes people inside to answer the door). GPCRs are like high-security doorbells because each GPCR responds to only one specific kind of signaling molecule (called its "endogenous ligand"), kind of like a high-tech door
20 lock that responds to only one fingerprint. Part of the GPCR is located outside the cell (the "extracellular domain"), part spans the cell's membrane (the "transmembrane domain"), and part is located inside the cell (the "intracellular domain"). Thus, GPCRs are embedded in the outer membrane of a cell and recognize and bind certain signaling molecules that are present in the spaces surrounding the cell. GPCRs are used by cells to keep an eye on the cells' own
25 activity and on the environment. In organisms that have many cells, the cells use GPCRs to talk to each other.

[5] GPCRs are important to the pharmaceutical industry and other industries. For example, many drugs, including some antibody-based drugs, act by binding to specific GPCRs and initiating or inhibiting their intracellular actions, and diagnostics and therapeutics
30 based on GPCRs or on antibodies for GPCRs are becoming increasingly important.

[6] General concepts about GPCRs are discussed in more scientific terms in the following paragraphs.

[7] The GPCR superfamily has at least 250 members, Strader et al., FASEB J., 9:745-754 (1995); Strader et al., Annu. Rev. Biochem., 63:101-32 (1994). GPCRs play important

roles in diverse cellular processes including cell proliferation and differentiation, leukocyte migration in response to inflammation, gene transcription, vision (the rhodopsins), smell (the olfactory receptors), neurotransmission (muscarinic acetylcholine, dopamine, and adrenergic receptors), and hormonal response (luteinizing hormone and thyroid-stimulating hormone receptors). Strader et al., *supra*; U.S. Patent nos. 5,994,097 and 6,063,596. Many important
5 drugs produce their therapeutic actions through their interaction with GPCRs.

[8] Nucleotide and amino acid sequences for many GPCRs have been reported and can be found in public databases such as GenBank and GenPept. Generally speaking, different GPCRs show both structural and sequence similarities. The most conserved domains of
10 GPCRs are the transmembrane domains and the first two cytoplasmic loops. GPCRs range in size from under 400 to over 1000 amino acids. Coughlin, S. R., Curr. Opin. Cell Biol. 6:191-197 (1994). They contain seven hydrophobic transmembrane regions that span the cellular membrane and form a bundle of antiparallel alpha helices. McKee K.K., *supra*. The bundle of helices forming the transmembrane regions provide many structural and functional
15 features of the receptor. In most cases, the bundle of helices form a pocket that binds a signaling molecule. However, when the binding site accommodates larger molecules, the extracellular N-terminal segment or one or more of the three extracellular loops participate in binding and in subsequent induction of conformational change in the intracellular portions of the receptor. These helices are joined at their ends by three intracellular and three
20 extracellular loops. GPCRs also contain cysteine disulfide bridges between the second and third extracellular loops, an extracellular N-terminus, and a cytoplasmic or intracellular C-terminus. The N-terminus is often glycosylated, while the C-terminus is generally phosphorylated. A conserved, acidic-Arg-aromatic triplet present in the second cytoplasmic loop may interact with G Proteins. Most GPCRs contain a characteristic consensus pattern.
25 Watson, S. and S. Arkininstall, The G protein Linked Receptor Facts Book, Academic Press, San Diego, CA (1994); Bolander, F. F. Molecular Endocrinology, Academic Press, San Diego, CA (1994).

[9] Although GPCRs have many features in common, each GPCR has its own unique characteristics as well. GPCRs have varying nucleotide and amino acid sequences, and
30 varying antigenicity. GPCRs bind a diverse array of specific, extracellular signaling molecules (which can also be referred to as "ligands") including peptides, cytokines, hormones, neurotransmitters, growth factors, and specialized stimuli such as photons,

flavorants, and odorants. Identified ligands include, for example, purines, nucleotides (*e.g.*, adenosine, cAMP, NTPs), biogenic amines (*e.g.*, epinephrine, norepinephrine, dopamine, histamine, noradrenaline, serotonin), acetylcholine, peptides (*e.g.*, angiotensin, calcitonin, chemokines, corticotropin releasing factor, galanin, growth hormone releasing hormone, gastric inhibitory peptide, glucagon, neuropeptide Y, neurotensin, opioids, thrombin, secretin, somatostatin, thyrotropin releasing hormone, vasopressin, vasoactive intestinal peptide), lipids and lipid-based compounds (*e.g.*, cannabinoids, platelet activating factor), excitatory and inhibitory amino acids (*e.g.*, glutamate, GABA), ions (*e.g.*, calcium), and toxins.

[10] In general, a GPCR binds only one type of signaling molecule and GPCRs are classified according to subfamilies based upon their selectivity and specificity for a particular ligand. When the ligand for a receptor is not known, the receptor is known as an orphan receptor. The extracellular domain interacts with or binds to certain signaling molecules or ligands located outside of the cell. The binding of a ligand to the extracellular domain alters the conformation of the receptor's intracellular domain causing the activation of a G protein. The G protein then activates or inactivates a separate plasma-membrane-bound enzyme or ion channel. This chain of events alters the concentration of one or more intracellular messengers (second messengers) such as cyclic AMP (cAMP), inositol triphosphate, diacylglycerol, or Ca^{2+} . These, in turn, alter the activity of other intracellular proteins such as cAMP-dependent protein kinase and Ca^{2+} /calmodulin-dependent protein kinases, leading to the transduction and amplification of the original extracellular signal. Baldwin, J.M., Curr. Opin. Cell Biol. 6:180-190 (1994). The G protein is deactivated by hydrolysis of GTP by GTPase. U.S. Patent Nos. 5,994,097 and 6,063,596.

[11] GPCR mutations, both of the loss-of-function and of the activating variety, have been associated with numerous human diseases, Coughlin, *supra*. For example, retinitis pigmentosa may arise from either loss-of-function or activating mutations in the rhodopsin gene. Somatic activating mutations in the thyrotropin receptor cause hyperfunctioning thyroid adenomas, Parma, J. et al., Nature 365:649-651 (1993). Parma et al. indicate that it may be possible that certain G protein-coupled receptors susceptible to constitutive activation may behave as proto-oncogenes. Interestingly, GPCRs have functional homologues in human cytomegalovirus and herpesvirus, so GPCRs may have been acquired during evolution for viral pathogenesis, Strader et al., FASEB J., 9:745-754 (1995); Arvanitakis et al., Nature, 385:347-350 (1997); Murphy, Annu. Rev. Immunol. 12:593-633 (1994). The

importance of the GPCR superfamily is further highlighted by the recent discoveries that some of its family members, the chemokine receptors CXCR4/Fusin and CCR5, are co-receptors for T cell-tropic and macrophage-tropic HIV virus strains, respectively, Alkhatib et al., Science, 272:1955 (1996); Choe et al., Cell, 85:1135 (1996); Deng et al., Nature, 381:661 (1996); Doranz et al., Cell, 85:1149 (1996); Dragic et al., Nature, 381:667 (1996); Feng et al., Science, 272:872 (1996). It is conceivable that blocking these receptors may prevent infection by the human immunodeficiency (HIV) virus. Other GPCR-related items include regulating cellular metabolism and diagnosing, treating and preventing particular diseases associated with particular GPCRs.

10 [12] One important way to evaluate GPCRs and antibodies for GPCRs as novel drug targets and for other purposes such as diagnostics is through the creation and use of databases. Such databases can provide large amounts of information about genes, proteins, and other biological matter. An excellent example of such a database is the GPCR database created and maintained by LifeSpan BioSciences, Inc., Seattle, Washington, USA, which
15 database is available by subscription to researchers and others needing such information. The information in the databases can, for example, be searched, compared, and analyzed. The compilation of such databases, as well as the searching, comparing, etc., of the databases, can be referred to as the field of "bioinformatics." Investigations largely related to genes, such as the information found from the sequencing of the human genome, can be called "genomics"
20 while similar activities on proteins can be called "proteomics."

[13] There has gone unmet a need for improved systems, compositions, methods, and the like relating to improved antigenicity of peptides from GPCRs and antibodies relating thereto. The present invention provides these and other advantages.

SUMMARY

25 [14] The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention
30 provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known

antibodies. The present invention also provides improved methods of selecting antigenic peptides from any desired protein or polypeptide, as well as antigenic peptides so produced and antibodies against such antigenic peptides.

[15] The antigenic peptides and antibodies herein can be used, for example, to detect the presence or absence of corresponding GPCRs. They can be used to diagnose a variety of diseases and disorders in which GPCRs are involved, such as, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

[16] The association of particular GPCRs with particular diseases, disorders or conditions will be apparent to a person of ordinary skill in the art in view of the present application, and thus the association with the antibodies of the present invention to the corresponding diseases, disorders or conditions.

5 [17] Thus, in one aspect the present invention provides isolated antigenic peptides according to any one of SEQ ID NOS. 692-2292. The isolated antigenic peptides also comprise an amino acid sequences that are at least about 90% or 95% identical to such sequences, or be an analog of such sequences, or comprise a short antigenic amino acid sequence that is identical to at least 5 consecutive amino acids set forth in any one of such
10 sequences or contain no more than one conservative amino acid substitution over at least 7 consecutive amino acids set forth in any of such sequences. The present invention also provides antibodies, particularly isolated antibody having high specificity and high affinity or avidity for a particular GPCR or other target polypeptide or protein, generated using the antigenic peptides discussed herein.

15 [18] The present invention also provides isolated nucleic acid molecules encoding an antigenic peptide or antibody as described herein. The molecule can encode a naturally occurring human antigenic peptide. In some embodiments, the present invention provides processes for producing an isolated polynucleotide can comprise hybridizing a nucleotide encoding an antigenic peptide as discussed herein to DNA such as genomic DNA under
20 stringent or highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

[19] The present invention also provides kits and assays, such as kits for the detection of antibodies against a particular GPCR or other target polypeptide in a sample comprising: a) an isolated antigenic peptide as discussed herein and derived from the particular GPCR, and
25 b) at least one of a reagent or a device for detecting the antibodies, or comprising: a) an isolated antibody as described herein, and b) at least one of a reagent or a device for detecting the antibody. The assays include detection of a particular GPCR in a sample, comprising: a) providing an isolated antigenic peptide, b) contacting the isolated antigenic peptide corresponding to the particular GPCR with the sample under conditions suitable and for a
30 time sufficient for the antigenic peptide to bind to one or more antibodies specific for the target protein present in the sample, to provide an antibody-bound target protein, and c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the

sample contains the particular GPCR. The assays can further comprise the step of binding the isolated antigenic peptide or the antibody to a solid substrate, and the sample can be an unpurified sample, for example from a human being.

[20] The assay can be selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.

[21] In other aspects, the present invention provides methods of identifying an amino acid sequence for an antigenic peptide from a candidate polypeptide sequence such as a polypeptide or protein wherein the antigenic peptide has a length of about 5 to about 100 amino acids, typically 6 amino acids to about 50 amino acids, and preferably 7 amino acids to about 20 amino acids. The methods comprise: a) searching the candidate polypeptide sequence using a comparison window of the length, and b) selecting against amino acid sequences of the length and having at least 1 to 3 or 4 characteristics selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising no charged amino acids. Preferably, the method comprises selecting against at least 5 to all of the characteristics.

[22] The methods can comprise, independently or in addition, selecting against amino acid sequences of the desired length having at least one of the following characteristics 1) sequences having at least 5 consecutive amino acids that are identical to an alternative amino acid sequence from an alternative polypeptide that can be different from the candidate polypeptide, 2) posttranslational modification sites, and 3) highly hydrophobic sequences. The posttranslational modification sites can be phosphorylation or glycosylation sites. The methods can also comprise performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence.

[23] These and other aspects, features, and embodiments are set forth within this application, including the following Detailed Description and attached drawings. The present invention comprises a variety of aspects, features, and embodiments; such multiple aspects,

features, and embodiments can be combined and permuted in any desired manner. In addition, various references are set forth herein, including in the Cross-Reference To Related Applications, that discuss certain compositions, apparatus, methods, or other information; all such references are incorporated herein by reference in their entirety and for all their teachings and disclosures, regardless of where the references may appear in this application.

BRIEF DESCRIPTION OF THE DRAWING

[24] Figure 1 depicts representative examples of the nucleotide and amino acid sequences of the GPCRs for which antigenic peptides are set forth herein, SEQ ID NOS. 1 - 691.

10 [25] Figure 2 depicts amino acid sequences for the antigenic peptides for the GPCRs herein, SEQ ID NOS. 692-2292.

[26] Figure 3 depicts a listing of GPCRS for which commercially available antibodies are putatively available.

DETAILED DESCRIPTION

15 A. INTRODUCTION AND OVERVIEW

[27] Diseases such as immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases are serious health problems in the modern world. Any improvement in the diagnosis, treatment or other remediation of such diseases is a significant advance for millions of people. The present invention provides methods of identifying and selecting desirable antigenic peptides for GPCRs and other desired target or candidate proteins and polypeptides. The present invention also provides the antigenic peptides themselves, as well as antibodies against the antigenic peptides (and against proteins or polypeptides containing such antigenic peptides), and related diagnostics, antibody-based therapeutics directed to 20 certain diseases and conditions, and other helpful compositions, systems, kits, assays and the like. The compositions, methods, and the like can be useful, for example, as agonists, antagonists, probes, and otherwise as may be desired.

[28] The antigenic peptides have been carefully selected using specific selection criteria and methodologies set forth herein to take advantage of particularly advantageous regions of 30 the GPCRs from which they have been derived to provide unusually specific and

immunogenic antigens. These antigenic peptides are particularly useful for producing highly specific antibodies against the antigenic peptides, which, in turn, also means antibodies that are highly specific for the corresponding GPCRs containing the antigenic peptides. Accordingly, the antigenic peptides of the present invention, and the antibodies produced therefrom, are particularly useful for high specificity, low noise diagnostics and, in the case of the antibodies, for certain antibody-based therapeutics, as well as methods, kits, systems, and the like incorporating or based on such antigenic peptides or antibodies.

[29] The antibodies produced using the antigenic peptides of the present invention, for example, have a specificity for the corresponding GPCR such that the antibodies can selectively detect the corresponding GPCR in a sample containing non-desired or contaminating proteins or polypeptides, such as a tissue or blood sample. Preferably, the antibodies have a high specificity such that no significant amounts of such proteins or polypeptides are detected, and further preferably have a specificity such that only insubstantial to essentially zero amounts of non-desirable proteins are detected.

[30] The antibodies produced using the antigenic peptides of the present invention, for example, typically have an affinity or avidity constant (K_a) of at least about 10^7 liters/mole, typically a high affinity or avidity at least about 10^9 liters/mole, preferably at least about 10^{10} liters/mole, and further preferably at least about 10^{11} liters/mole.

[31] Figure 1 sets forth the DNA and protein sequences for the GPCRs from which the antigenic peptides of the present invention were derived SEQ ID NOS. 1-691. Figure 2 sets forth the amino acid sequences of exemplary antigenic peptides, SEQ ID NOS. 692-2292. The sequences in Figures 1 and 2 are listed according to SEQ ID NO and LSID, which is an identification number assigned to the given sequence in the LifeSpan Biosciences databases. The sequences in Figure 2 also include an identifier LPID, which is also an identification number assigned to the given sequence in the LifeSpan Biosciences databases. Figure 3 depicts GPCRs for which it has been reported that antibodies are commercially available, SEQ ID NOS. 1, 3, 5, 11, 13, 15, 21, 23, 25, 27, 29, 31, 35, 37, 39, 41, 43, 45, 49, 51, 53, 57, 59, 61, 63, 65, 67, 69, 70, 71, 73, 75, 77, 79, 83, 85, 97, 99, 101, 103, 105, 107, 113, 115, 117, 121, 125, 135, 139, 143, 145, 147, 151, 155, 157, 159, 161, 169, 171, 173, 175, 177, 183, 185, 187, 189, 191, 192, 194, 200, 202, 206, 208, 214, 216, 218, 228, 236, 238, 240, 248, 250, 264, 295, 299, 301, 305, 311, 313, 315, 317, 319, 321, 323, 325, 327, 329, 331, 333, 335, 337, 347, 349, 351, 361, 365, 367, 369, 371, 377, 379, 385, 387, 389, 391, 397,

423, 435, 439, 457, 459, 461, 462, 468, 470, 472, 503, 507, 515, 535, 537, 546, 548, 552, 562, 628, 636; Applicants do not represent that any of the antibodies in Figure 3 that such antibodies are actually commercially available nor that they have any significant specificity nor affinity for the GPCRs reported. For GPCRs for which no antigens or antibodies were
5 previously known, the present invention provides valuable antigenic peptides and antibodies (see, e.g., SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-
10 1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.); for GPCRs for which antigens or antibodies are known, the present invention provides improved antigens in the form of antigenic peptides and improved antibodies (see, e.g., SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889,
15 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, which are antigenic peptides derived from GPCRs for which antibodies are reportedly commercially available). The antigenic peptides and antibodies, and uses and assays, etc., related to the antigenic peptides, are discussed further
20 below.

[32] The discussion herein, including the following passages, has been separated by headings for convenience. The disclosure under a given heading is not restricted to that heading. For example, the discussion in the definitions section is a part of the disclosure of the invention, the discussion on antigenic peptides also contains discussion related to probes
25 and diagnostics, and the discussion on antibodies contains discussion related to therapeutic compositions, etc.

B. DEFINITIONS

[33] The following paragraphs provide a non-exhaustive list of definitions of some of the
30 terms and phrases as used herein. All terms used herein, including those specifically described below in this section, are used in accordance with their ordinary meanings unless the context or definition indicates otherwise. Also unless indicated otherwise, except within

the claims, the use of "or" includes "and" and vice-versa. Non-limiting terms are not to be construed as limiting unless expressly stated (for example, "including" means "including without limitation" unless expressly stated otherwise).

[34] The terms set forth in this application are not to be interpreted in the claims as indicating a "means plus function" relationship unless the word "means" is specifically recited in a claim, and are to be interpreted in the claims as indicating a "means plus function" relationship where the word "means" is specifically recited in a claim. Similarly, the terms set forth in this application are not to be interpreted in method or process claims as indicating a "step plus function" relationship unless the word "step" is specifically recited in the claims, and are to be interpreted in the claims as indicating a "step plus function" relationship where the word "step" is specifically recited in a claim.

[35] "Agonist" indicates a substance, such as a molecule or compound, that interacts with a particular GPCR, for example by binding to the GPCR, to activate, increase, or prolong the amount or the duration of the effect of the biological activity or functionality of the GPCR. Agonists include proteins, nucleic acids, carbohydrates, or any other molecules that bind to and positively modulate the effect of the GPCR. Agonists and other modulators of the particular GPCR can be identified using *in vitro* or *in vivo* assays for G protein-coupled receptor expression or G protein-mediated signaling. For example, assays for agonists and other modulators include expressing a particular GPCR in cells or cell membranes, applying putative modulator compounds in the presence or absence of a specific known or putative ligand and then determining the functional effects on the particular GPCR-mediated signaling. Samples or assays comprising a particular GPCR that are treated with a potential agonist or other modulator are compared to control samples without the agonist or other modulator to examine the extent of modulation. Control samples can be assigned a relative activity value for the particular GPCR of 100%. Agonist activity on a particular GPCR is achieved when the G protein-coupled receptor activity value relative to the control is at least about 110%, optionally about 150%, preferably about 200-500%, or about 1000-3000% or higher. Down-modulation (for example by an antagonist) of a particular GPCR is achieved when the particular GPCR activity value relative to the control is at most about 90%, typically about 80%, optionally about 50% or about 25-0% of the 100% value.

[36] "Aggregate," see Complex.

[37] "Algorithm" refers to a detailed sequence of actions to perform to accomplish some task. In computer programming, refers to instructions given to the computer.

[38] "Allele" or "allelic sequence" indicates an alternative form of the gene encoding the GPCR. Alleles may result from at least one mutation in the nucleic acid sequence and may result in altered mRNAs or in polypeptides whose structure or function may or may not be altered. Any given natural or recombinant gene may have none, one, or many allelic forms. Common mutational changes that give rise to alleles are generally ascribed to natural deletions, additions, or substitutions of nucleotides. Each of these types of changes may occur alone or in combination with the others, one or more times in a given sequence.

[39] "Altered" nucleic acid sequences encoding the GPCR include those sequences with deletions, insertions, or substitutions of different nucleotides, resulting in a polynucleotide encoding the same GPCR or a polypeptide variant with at least one substantial structural or functional characteristic of the GPCR. Included within this definition are polymorphisms that may or may not be readily detectable using a particular oligonucleotide probe against the polynucleotide encoding the GPCR. "Altered" proteins may contain deletions, insertions, or substitutions of amino acid residues that produce a silent change and result in a functionally equivalent GPCR. Deliberate amino acid substitutions may be made on the basis of similarity in polarity, charge, solubility, hydrophobicity, hydrophilicity, or the amphipathic nature of the residues, as long as the biological or immunological activity of the GPCR is retained. For example, negatively charged amino acids may include aspartic acid and glutamic acid, positively charged amino acids may include lysine and arginine, and amino acids with uncharged polar head groups having similar hydrophilicity values may include leucine, isoleucine, and valine; glycine and alanine; asparagine and glutamine; serine and threonine; and phenylalanine and tyrosine.

[40] "Alternative splicing" refers to different ways of cutting and assembling exons to produce mature mRNAs.

[41] "Amino acid" refers generally to any of a class of organic compounds that contains at least one amino group, $-NH_2$, and one carboxyl group, $-COOH$. The alpha-amino acids, $RCH(NH_2)COOH$, are the building blocks from which proteins are typically constructed.

Amino acid can also refer to artificial chemical analogues or mimetics of a given amino acid as described, depending on the context.

[42] "Amino acid sequence" refers to a string of amino acids, such as an oligopeptide, peptide, polypeptide, or protein sequence, or a fragment of any of these, including naturally occurring or synthetic molecules and those comprising an artificial chemical analogue or mimetic of a given amino acid. In this context, "biologically active fragments," "biologically functional fragments," "immunogenic fragments," and "antigenic fragments" refer to fragments of the GPCR that are preferably about 15, 25, or 50 or more amino acids in length and that retain a substantial amount of such activity of the GPCR. Where "amino acid sequence" refers to an amino acid sequence of a naturally occurring protein molecule, "amino acid sequence" and like terms are not necessarily limited to the complete native amino acid sequence associated with the recited protein molecule.

[43] "Amplification" indicates the production of additional copies of something, such as a nucleic acid sequence. Amplification can be generally carried out using polymerase chain reaction (PCR) technologies or other technologies such as the cycling probe reaction (CPR) that are well known in the art. *See, e.g.*, Dieffenbach, C. W. and G. S. Dveksler, PCR Primer, a Laboratory Manual, pp.1-5, Cold Spring Harbor Press, Plainview, N.Y. (1995); U.S. Patents Nos. 5,660,988, 5,731,146 and 6,136,533.

[44] "Amplification primers" are oligonucleotides such as natural, analog or artificially created nucleotides that can serve as the basis for the amplification of a selected nucleic acid sequence. They include, for example, both PCR primers and ligase chain reaction oligonucleotides.

[45] "Analog" or "variant" indicates a GPCR or antigenic peptide that has been modified by deletion, addition, modification, or substitution of one or more amino acid residues compared to the wild-type sequence. Analogs encompass allelic and polymorphic variants, and also muteins and fusion proteins that comprise all or a significant part of such GPCR, *e.g.*, covalently linked via side-chain group or terminal residue to a different protein, polypeptide, or moiety (fusion partner). Variants of a particular GPCR protein refer to an amino acid sequence that is altered by one or more amino acids, for example by one or more amino acid substitution, insertion, deletion or modification, or proteins with or without associated native-pattern glycosylation. The variant may have "conservative" changes. Such "conservative" changes generally are well known in the art and readily determinable for a particular GPCR in view of the present application. Conservative changes include, for example, substitutions where a substituted amino acid has similar structural or chemical

properties to the amino acid it replaced (*e.g.*, negatively charged amino acids include aspartic acid and glutamic acid; positively charged amino acids include lysine, arginine, histidine, asparagine, and glutamine; amino acids containing sulfur include methionine and cysteine; polar hydroxy amino acids include serine, threonine, and tyrosine; large hydrophobic amino acids include phenylalanine and tryptophan; small hydrophobic amino acids include alanine, leucine, isoleucine, and valine). A variant may also have "nonconservative" changes which means that the replacement amino acid provides some substantial change in the amino sequence.

[46] A variant preferably retains at least about 90% identity, and more preferably at least about 95% identity. Within certain embodiments, such variants contain alterations such that the ability of the variant to induce an immunogenic response is not substantially eliminated; in some embodiments the ability to an immunogenic response is not substantially diminished. Modifications of amino acid residues may include but are not limited to aliphatic esters or amides of the carboxyl terminus or of residues containing carboxyl side chains, O-acyl derivatives of hydroxyl group-containing residues, and N-acyl derivatives of the amino-terminal amino acid or amino-group containing residues, *e.g.*, lysine or arginine. Guidance in determining which and how many amino acid residues may be substituted, inserted, deleted or modified without diminishing immunological or biological activity may be found in view of the present application using any of a variety of methods and computer programs known in the art, for example, DNASTAR software. Properties of a variant may generally be evaluated by assaying the reactivity of the variant with, for example, antibodies as described herein or evaluating a biological activity characteristic of the native protein as described herein or as known in the art in view of the present application. Certain polynucleotide variants are capable of hybridizing under appropriately stringent conditions to a naturally occurring DNA sequence encoding a particular GPCR protein (or a complementary sequence). Such hybridizing nucleic acid sequences are also within the scope of this invention.

[47] "Antagonist" refers to a molecule which interacts with a particular GPCR, for example by binding to the particular GPCR, and prevents, inactivates, decreases or shortens the amount or the duration of the effect of the biological activity of the GPCR. Antagonists include proteins, nucleic acids, carbohydrates, antibodies, or any other molecules that so affect the GPCR. Antagonists can be identified, for example, using appropriate screens

corresponding to those described for agonists above and elsewhere herein or as would be apparent to those skilled in the art in view of the present application.

[48] "Antibody" indicates one type of binding partner, typically encoded by an immunoglobulin gene or immunoglobulin genes, and refers to, for example, intact
5 monoclonal antibodies (including agonist and antagonist antibodies), polyclonal antibodies, phage display antibodies, and multispecific antibodies (*e.g.*, bispecific antibodies) formed, for example, from at least two intact antibodies. Antibody also refers to fragments thereof, which comprise a portion of an intact antibody, generally the antigen-binding or variable region of the intact antibody that are capable of binding the epitopic determinant. Examples
10 of antibody fragments include Fab, Fab', F(ab')₂, and Fv fragments, diabodies, linear antibodies, single-chain antibody molecules, and multispecific antibodies formed from antibody fragments. *See* US Patent No. 6,214,984. Antibody fragments may be synthesized by digestion of an intact antibody or synthesized *de novo* either chemically or utilizing recombinant DNA technology. Antibodies according to the present invention have at least
15 one of adequate specificity, affinity and capacity to perform the activities desired for the antibodies. Antibodies can, for example, be monoclonal, polyclonal, or combinatorial. Antibodies that bind GPCR polypeptides can be prepared using intact polypeptides or using fragments containing small peptides of interest as the immunizing antigen. The polypeptide or oligopeptide used to immunize an animal (*e.g.*, a mouse, a rat, or a rabbit) can be derived
20 from the translation of RNA, or synthesized chemically, and can be conjugated to a carrier protein if desired. Commonly used carriers that are chemically coupled to peptides include bovine serum albumin, thyroglobulin, and keyhole limpet hemocyanin (KLH). The coupled peptide is then used to immunize the animal.

[49] "Antigenic determinant" refers to the antigen recognition site on an antigen (*i.e.*,
25 epitope). Such antigenic determinant may also be immunogenic.

[50] "Antisense" refers to any composition containing a nucleic acid sequence that is complementary to a specific nucleic acid sequence. "Antisense strand" refers to a nucleic acid strand that is complementary to the "sense" strand. Antisense molecules may be produced by any method including transcription or synthesis including synthesis by ligating
30 the gene(s) of interest in a reverse orientation to a desired promoter that permits the synthesis of a complementary strand. Once introduced into a cell, the complementary nucleotides can combine with natural sequences produced by the cell to form duplexes and to block either

transcription or translation. The designation "negative" can refer to the antisense strand, and the designation "positive" can refer to the sense strand.

[51] **"Biologically active"** or **"biologically functional,"** when referring to an antigenic peptide, indicates that the antigenic peptide induces an immunogenic response specific for the antigenic peptide and thus for the GPCR from which it was obtained. A variant, fragment, etc., of an antigenic peptide is "biologically active" or "biologically functional" if the ability to induce the specific immunogenic response is not substantially diminished. The term "not substantially diminished" means retaining a functionality that is at least about 90% of the functionality of the native antigenic peptide. Appropriate assays designed to evaluate such functionality may be designed based on existing assays known in the art in view of the present application, or on the representative assays provided herein.

[52] **"Annotation"** refers to the provision of helpful or identifying information about a GPCR or other open reading frame (ORF), such as locus name, key words, and Medline references.

[53] **"BLAST"** refers to the Basic Local Alignment Search Tool, which is a technique for detecting ungapped sub-sequences that match a given query sequence. BLAST can be used as a preliminary step for detecting ORF boundaries.

[54] **"BLASTP"** refers to a BLAST program that compares an amino acid query sequence against a protein sequence database.

[55] **"BLASTX"** refers to a BLAST program that compares the six-frame conceptual translation products of a nucleotide query sequence (both strands) against a protein sequence database. BLASTX can be used to create a sub-database of ORFs which may exist on a contig, and to identify the best match between one of these ORFs and a sequence in an external database.

[56] **"Buffer"** refers to a component in a solution to provide a buffered solution that resists changes in pH by the action of its acid-base conjugate components.

[57] **"CDS"** refers to the GenBank DNA sequence entry for coding sequence. A coding sequence is a sub-sequence of a DNA sequence that is surmised to encode a gene. A complete gene coding sequence begins with an "ATG" and ends with a stop codon.

[58] **"Clone"** in molecular biology refers to a vector carrying an insert DNA sequence.

[59] **"Cloning"** in molecular biology refers to a recombinant DNA technique used to produce multiple, up to millions or more, copies of a DNA sequence. The DNA sequence is

inserted into a small carrier or vector (*e.g.*, plasmid, bacteriophage, or virus) and inserted into a host cell for amplification or expression.

[60] "Cluster" refers to a group of ORFs related to one another by sequence homology. Clusters are generally determined by a specified degree of homology and overlap (*e.g.*, a stringency).

[61] "Comparison window" indicates a segment of any one of the number of contiguous positions selected from the group consisting of from 20 to 600; usually about 50 to about 200, more usually about 100 to about 150 in which a sequence may be compared to a reference sequence of the same number of contiguous positions after the two sequences are aligned to enhance sequence similarity. Methods of alignment of sequences for comparison will be readily apparent to a person of ordinary skill in the art in view of the present application.

[62] "Complementary" or "complementarity" refers to the natural binding of polynucleotides by base pairing. For example, the sequence "A-G-T" binds to the complementary sequence "T-C-A." Complementarity between two single-stranded molecules may be "partial," such that only some of the nucleic acids bind, or it may be "complete," such that all of the nucleotides of at least one of the single-stranded molecules binds to corresponding nucleotides of the other single-stranded molecule. The degree of complementarity between nucleic acid strands has significant effects on the efficiency and strength of the hybridization between the nucleic acid strands. This can be of particular importance in amplification reactions, which can depend upon binding between nucleic acids strands, and in the design and use of peptide nucleic acid (PNA) molecules.

[63] "Complex," or "aggregate," indicates a dimer or multimer formed between at least two proteins or other macromolecules, for example a GPCR and its ligand.

[64] "Composition" indicates a combination of multiple substances into a mixture.

[65] "Composition comprising a given amino acid sequence" refers broadly to any composition containing the given amino acid sequence. The composition may comprise a dry formulation, an aqueous solution, or a sterile composition.

[66] "Consensus sequence" refers to the sequence that reflects the most common choice of base or amino acid at each position from a series of related DNA, RNA, or protein sequences. Areas of particularly good agreement often represent conserved functional domains. The generation of consensus sequences has typically been subjected to intensive mathematical analysis.

- [67] "Conservative changes" to an amino acid sequence, see Analog.
- [68] "Deletion" refers to a change in the amino acid or nucleotide sequence that results in the absence of one or more amino acid residues or nucleotides.
- [69] "Derivative" refers to chemical modification of an antigenic peptide, or of an antibody specific for and created from the antigenic peptide. A derivative peptide can be modified, for example, by glycosylation or pegylation.
- [70] "Diabodies" refers to one type of antibody comprising small antibody fragments with two antigen-binding sites, which fragments comprise a heavy-chain variable domain (V_H) connected to a light-chain variable domain (V_L) on the same polypeptide chain (V_H - V_L). By using a linker that is too short to allow pairing between the two domains on the same chain, the domains pair with the complementary domains of another chain and create two antigen-binding sites. Diabodies are described, for example, in EP 404,097; WO 93/11161; and Holliger et al., Proc. Natl. Acad. Sci. USA, 90:6444-6448 (1993).
- [71] "Database" refers to a structured format for organizing and maintaining information or data, a collection of data records, in a computer-readable form that can be rapidly and easily retrieved. A database is typically stored in a computer-readable memory. Records may comprise web pages, graphics, audio files, text files, or links. Records may or may not be further broken into fields. Database records are usually indexed and come with a search interface to find records of interest.
- [72] "E-value" refers to a result of a FASTA analysis. The number indicates the probability that a match between two sequences is due to random chance.
- [73] "Expression vector" is a specialized vector constructed so that the gene inserted in the vector can be expressed in the cytoplasm of a host cell.
- [74] "FASTA" refers to a modular set of sequence comparison programs used to compare an amino acid or DNA sequence against all entries in a sequence database. FASTA was written by Professor William Pearson of the University of Virginia Department of Biochemistry. The program uses the rapid sequence algorithm described by Lipman and Pearson (1988) and the Smith-Waterman sequence alignment protocol. FASTA performs a protein to protein comparison.
- [75] "FASTX" refers to a module of the FASTA protocol used to define optimal ORF boundaries while searching for genes. FASTX uses a nucleotide to protein sequence comparison.

[76] "Fragment," see Portion.

[77] "GenBank" refers to a family of public databases comprising nucleic acid and amino acid sequence information, including the GenPept bacterial peptide database.

[78] "Gene" refers to the basic unit of heredity that carries the genetic information for a given RNA or protein molecule. A gene is composed of a contiguous stretch of DNA and contains a coding region that is flanked on each end by regions that are transcribed but not translated. A gene is a segment of DNA involved in producing a biologically active or biologically functional polypeptide chain.

[79] "Heterologous" indicates a nucleic acid that comprises two or more subsequences that are not found in the same relationship to each other in nature. For instance, the nucleic acid is typically recombinantly produced, having two or more sequences from unrelated genes arranged to make a new functional nucleic acid, *e.g.*, a promoter from one source and a coding region from another source. Similarly, a heterologous protein indicates that the protein comprises two or more subsequences that are not found in the same relationship to each other in nature (*e.g.*, a fusion protein).

[80] "Hit Threshold" refers to a pre-set E-value or P-value for evaluating sequence matches. For example, this value can be set at $1e-6$ for finding genes; and at $1e-15$ for clustering genes.

[81] "Homology" refers to a degree of complementarity. There may be partial homology or complete homology. The word "identity" may substitute for the word "homology." A partially complementary sequence that at least partially, and substantially, inhibits a corresponding sequence from hybridizing to a target nucleic acid is referred to as "substantially homologous." The inhibition of hybridization of the completely complementary sequence to the target sequence may be examined using a hybridization assay (*e.g.*, Southern or Northern blot, *in situ* hybridization, solution hybridization) under conditions of reduced stringency. A substantially homologous sequence or hybridization probe will compete for and inhibit the binding of a completely homologous sequence to the target sequence under stringency conditions that inhibit non-specific binding but permit specific binding. The absence of non-specific binding may be tested by the use of a second target sequence which lacks even a partial degree of complementarity (*e.g.*, less than about 30% homology or identity). In the absence of non-specific binding, the substantially

homologous sequence or probe will not hybridize to the second, non-complementary target sequence.

[82] **"Humanized antibody"** refers to antibody molecules in which the amino acid sequence in the non-antigen-binding regions has been altered so that the antibody more closely resembles a human antibody, and still retains its original binding ability. Typically, humanized antibodies are human immunoglobulins (recipient antibody) in which residues from a complementarity-determining region (CDR) of the recipient are replaced by residues from a CDR of a non-human species (donor antibody) such as mouse, rat or rabbit having the desired specificity, affinity, and capacity. In some instances, Fv framework residues of the human immunoglobulin are replaced by corresponding non-human residues. Furthermore, humanized antibodies may comprise residues that are found neither in the recipient antibody nor in the imported CDR or framework sequences. These modifications are typically made to further refine and optimize antibody performance. In general, the humanized antibody will comprise substantially all of at least one, and typically two, variable domains, in which all or substantially all of the CDR regions correspond to those of a non-human immunoglobulin and all or substantially all of the framework (FR) regions are those of a human immunoglobulin sequence. The humanized antibody optimally also will comprise at least a portion of an immunoglobulin constant region (Fc), typically that of a human immunoglobulin. For further details see, *e.g.*, Jones et al., *Nature*, 321:522-525 (1986); Reichmann et al., *Nature*, 332:323-329 (1988); and, Presta, *Curr. Op. Struct. Biol.*, 2:593-596 (1992).

[83] **"Identity,"** see Homology.

[84] **"Immunocytochemistry"** refers to the use of immunologic methods, including a specific antibody, to study cell constituents.

[85] **"Immunohistochemistry"** refers to the use of immunologic methods, including a specific antibody, to study specific antigens in tissue slices.

[86] **"Immunolocalization"** refers to the use of immunologic methods, including a specific antibody, to locate molecules or structures within cells or tissues.

[87] **"Immunologically active"** refers to the capability of a natural, recombinant, or synthetic GPCR, or any immunogenic fragment thereof, to induce a specific immune response in appropriate animals or cells and to bind with specific antibodies. A polypeptide is "immunologically active" if it is recognized by (*e.g.*, specifically bound by) a B-cell or T-

cell surface antigen receptor. Immunological activity may generally be assessed using well known techniques, such as those summarized in Paul, Fundamental Immunology, 3rd ed., 243-247, Raven Press (1993) and references cited therein. Such techniques include screening polypeptides derived from the native polypeptide for the ability to react with antigen-specific antisera or T-cell lines or clones, which may be prepared in view of the present application using well known techniques. Preferably, an immunologically active portion of a GPCR protein reacts with such antisera or T-cells at a level that is not substantially lower than the reactivity of the full-length polypeptide (e.g., in an ELISA or T-cell reactivity assay). Such screens may generally be performed using methods well known to those of ordinary skill in the art in view of the present application, such as those described in Harlow and Lane, Antibodies: A Laboratory Manual, Cold Spring Harbor Press (1988). B-cell and T-cell epitopes may also be predicted via computer analysis.

[88] "Immune response" refers to any of the body's immunologic reactions to an antigen such as antibody formation, cellular immunity, hypersensitivity, or immunological tolerance.

[89] "Insertion" and "addition" when referring to a change in a nucleotide or amino sequence indicate the addition of one or more nucleotides or amino acid residues, respectively, to the sequence.

[90] "*In situ* hybridization" refers to use of a nucleic acid probe, typically a DNA or RNA probe, to detect the presence of a DNA or RNA sequence in target cells such as cloned bacterial cells, cultured eukaryotic cells, or tissue samples. *In situ* hybridization can also be used for locating genes on chromosomes. The process can be performed by preparing a microscope slide with cells in metaphase of mitosis, then treating slide with a weak base to denature the DNA. Next, pour radioactively labeled probe onto the slide under hybridizing conditions, expose the slide to a photographic emulsion for a suitable period such as a few days or weeks, then develop the emulsion.

[91] "Isoform" refers to different forms of a protein that may be produced from different genes or from the same gene by alternative RNA splicing.

[92] "Isolated" generally means that the material is removed from its original environment (e.g., the natural environment if it is naturally occurring).

[93] "Library" refers physically to a pool of nucleic acid fragments that has been propagated in a cloning vector. Library can also refer to an electronic collection of genomic

or proteomic sequence data, including raw sequences, contigs, ORFs and loci from a specific organism.

- [94] "Ligand" refers to an ion or molecule that binds with another molecule, such as a GPCR, to form a macromolecule such as a receptor-ligand complex. An "endogenous
5 ligand" refers to a native ligand that binds to the receptor of the GPCR and modulates biological activity or functionality of the GPCR in its native environment. A "specific ligand" is a ligand able to bind to a particular GPCR and modulate the biological activity or functionality of the particular GPCR; an endogenous ligand is one example of a specific ligand.
- 10 [95] "Microarray" refers to an array of distinct nucleic acid or amino acid molecules arrayed on a substrate, such as paper, nylon or any other type of membrane, filter, chip, glass slide, or any other suitable solid support. Microarrays can also refer to tissue microarrays, composed of small tissue pieces arranged on a slide. U.S. Pat. No. 5,143,854 and PCT Patent Publication Nos. WO 90/15070 and 92/10092.
- 15 [96] "Mimetic" refers to a molecule, *e.g.*, a peptide or non-peptide agent, such as a small molecule, that is able to perform the same biological activity as a certain biologically active agent. For example, some mimetics are molecules comprising the same biological function or activity as the particular GPCR. The structure of the mimetic can be developed from knowledge of the structure of the particular GPCR or portions thereof. For appropriate
20 mimetics, the mimetic is able to effect some or all of the actions of a given antigenic peptide or antibodies against the antigenic peptide. Such mimetics can be made, in view of the present application, using techniques well known in the art, *see, e.g.*, U.S. Patent Nos. 6,197,752; 6,093,697; 6,207,643; 5,849,323, and can be included in the various processes, methods, and systems, etc., described herein, such as databases, binding partner assays,
25 probes, medicaments, and therapeutics.
- [97] "Modulate" refers to controllably changing the activity of a substance or other item, such as the biological activity of a GPCR, antigenic peptide or corresponding antibody. For example, modulation may cause an increase or a decrease in protein activity, binding characteristics, or other biological, functional, or immunological properties of the GPCR.
- 30 [98] "Monoclonal antibody" refers to an antibody obtained from a population of substantially homogeneous antibodies, *e.g.*, the individual antibodies comprising the population are identical except for possible naturally occurring mutations that may be present

in minor amounts. Monoclonal antibodies include "chimeric" antibodies (immunoglobulins) in which a portion of the heavy or light chain is identical with or homologous to corresponding sequences in antibodies derived from a particular species or belonging to a particular antibody class or subclass, while the remainder of the chain(s) is identical with or homologous to corresponding sequences in antibodies derived from another species or belonging to another antibody class or subclass, as well as fragments of such antibodies, so long as they exhibit the desired biological activity. U.S. Pat. No. 4,816,567; Morrison et al., P.N.A.S. USA, 81:6851-6855 (1984). Monoclonal antibodies are highly specific, being directed against a single antigenic site. As a matter of distinction, polyclonal antibody preparations typically include different antibodies directed against different determinants (epitopes) of a target antigen whereas each monoclonal antibody is directed against a single determinant on the antigen. Monoclonal antibodies can be synthesized by hybridoma culture, uncontaminated by other immunoglobulins. For example, the monoclonal antibodies to be used in accordance with the present invention may be made by the hybridoma method first described by Kohler and Milstein, Nature, 256:495 (1975), or may be made by recombinant DNA methods. See, e.g., U.S. Pat. No. 4,816,567. Monoclonal antibodies may also be isolated from phage antibody libraries using the techniques described in Clackson et al., Nature, 352:624-628 (1991), and Marks et al., J. Mol. Biol., 222:581-597 (1991), for example. The modifier "monoclonal" indicates the character of the antibody as being obtained from a substantially homogeneous population of antibodies, and is not to be construed as requiring production of the antibody by any particular method.

[99] "Nonconservative" changes to an amino acid sequence, see Analog.

[100] "Northern blotting" or "Northern analysis" refers to a method used to detect specific RNA sequences. For example, the process can be performed by electrophoresing RNA in a denaturing agarose gel, transferring the gel onto a membrane, and hybridizing with a labeled RNA or DNA probe.

[101] "Nucleic acid sequence" refers to a polymer comprising a string of "nucleic acids" such as an oligonucleotide, or a polynucleotide or fragment thereof. The nucleic acid sequence can be from DNA or RNA of genomic or synthetic origin, may be single-stranded or double-stranded, and may represent the sense or the antisense strand. A nucleic acid sequence can also be a PNA or a DNA-like or RNA-like material. Unless stated otherwise,

the term encompasses nucleic acids containing known analogues or mimetics of natural nucleotides that have similar binding properties as the reference nucleic acid.

[102] "Oligonucleotide" refers to a nucleic acid sequence, generally between 6 nucleotides to 60 nucleotides, preferably about 15 to 30 nucleotides, and most preferably about 20 to 25 nucleotides, that can, for example, be used in PCR or other nucleic acid amplification or in a hybridization assay or microarray. "Oligonucleotide" includes "amplimers," "primers," "oligomers," and "probes," as these terms are commonly defined in the art. Oligonucleotides can be chemically synthesized. Such synthetic oligonucleotides may have no 5' phosphate and if so will not ligate to another oligonucleotide without adding a phosphate, typically by using an ATP in the presence of a kinase. A synthetic oligonucleotide will ligate to a fragment that has not been dephosphorylated.

[103] "Operably linked" or "operably connected" indicates that one element of an apparatus, system, or method, etc., is connected to another element of the apparatus, system, or method, etc., such that the two elements are able to perform their intended purposes. For example, when a promoter is linked to a polynucleotide to allow transcription of the polynucleotide, it is "operably linked" to the polynucleotide.

[104] "Orphan receptor" refers to a receptor for which the endogenous ligand or other ligands inducing biological activity are not known.

[105] "PCR" or "polymerase chain reaction" refers to an *in vitro* method that uses oligonucleotide primers, enzymes, and a series of repetitive temperature cycles to generate millions of copies of a nucleic acid, typically DNA, from an original specimen of a specific DNA sequence, which specimen may be present only in a trace amount.

[106] "Plasmids" refers to extrachromosomal genetic elements composed of DNA or RNA found in both eukaryotic and prokaryotic cells that can propagate themselves autonomously in cells. Plasmids can be used as carriers or vectors to clone DNA molecules. They are designated by a lower case p preceded or followed by capital letters or numbers. The starting plasmids herein are either commercially available, publicly available on an unrestricted basis, or can be constructed from available plasmids in accord with published procedures. In addition, equivalent plasmids to those described are known in the art and will be apparent to the ordinarily skilled artisan in view of the present application.

[107] **"Polynucleotide encoding a polypeptide"** indicates a polynucleotide that includes only the coding sequence for the polypeptide as well as polynucleotides that include additional coding or non-coding sequence.

[108] **"Portion"** or **"fragment"** with regard to a protein (as in "a portion of a given protein") refers to parts of that protein, a subsequence of the complete amino acid sequence of the receptor containing at least about 8, usually at least about 12, more typically at least about 20, and commonly at least about 30 or more contiguous amino acid residues, up to the entire amino acid sequence minus one amino acid. Thus, a protein "comprising at least a portion of the amino acid sequence of SEQ ID NO:XX" or a protein "comprising at least a portion of the amino acid sequence of a particular GPCR" encompasses the full-length protein and fragments thereof. A portion or fragment of a nucleic acid refers to nucleic acid sequences that are greater than about 12 nucleotides in length, and typically at least about 60 or 100 nucleotides, generally at least about 1000 nucleotides, or at least about 10,000 nucleotides in length, up to the entire nucleic acid sequence minus one nucleic acid.

[109] **"P-value"** is a statistical term used to indicate the probability that an event is due to random chance. When used in reference to a result of BLAST searches, the number indicates the probability that a match between two sequences is due to random chance.

[110] **"Receptor"** refers to a molecular structure, typically within a cell or on a cell surface, that selectively binds a specific substance (a ligand) and a specific physiologic effect that accompanies the binding. GPCRs are a type of cell-surface receptor, which means a protein in, on, or traversing the cell membrane (in the case of GPCRs, traversing the cell membrane) that recognizes and binds to specific molecules in the surrounding fluid. The binding to a receptor may serve to transport molecules into the cell's interior or to signal the cell to respond in some way.

[111] **"Recombinant"** refers to both a method of production and a structure. Some recombinant nucleic acids and proteins are made by the use of recombinant DNA techniques that involve human intervention, either in manipulation or selection. Others are made by fusing two fragments that are not naturally contiguous to each other. Engineered vectors are encompassed, as well as nucleic acids comprising sequences derived using any synthetic oligonucleotide process.

[112] **"Sample"** is used in its usual broad sense. For example, a biological sample suspected of containing nucleic acids encoding the GPCR, or fragments thereof, or the GPCR

itself, may comprise a bodily fluid; an extract from a cell, chromosome, organelle, or membrane from a cell; a cell; genomic DNA, RNA, or cDNA (in solution or bound to a solid support); a tissue; a tissue print, and the like. Biological sample refers to samples from a healthy individual as well as to samples from a subject suspected of having or susceptible to

5 having, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal

10 cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma,

15 endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis,

20 rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma),

25 septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or

30 disorder in which a specific GPCR is involved.

[113] "Second messengers" refer to intracellular signaling molecules such as cyclic AMP (cAMP), inositol triphosphate, diacylglycerol, or Ca^{2+} . Second messengers, in turn, alter the

activity of other intracellular proteins such as cAMP-dependent protein kinase and Ca^{2+} /calmodulin-dependent protein kinases, leading to the transduction and amplification of the original extracellular signal.

[114] "Southern blotting" refers to a method for detecting specific DNA sequences via hybridization. For example, a DNA sample can be electrophoresed in a denaturing agarose gel, transferred onto a membrane, and hybridized with a complementary nucleic acid probe. "Southern" when used in reference to a database indicates an electronic analog of the laboratory technique, which analysis can be used to identify libraries in which a given DNA sequence, such as a gene, EST, or ORF is present. The terms "Northern" and "Western" likewise can be used for electronic analogs to the respective laboratory techniques described above.

[115] "Specific binding" or "specifically binding" refers to an interaction between protein or peptide and a certain substance, such as its specific ligand or antibody, and in some cases its agonists or antagonists. The interaction is dependent upon the presence of a particular structure of the protein recognized by the binding molecule (e.g., the antigenic determinant or epitope). For example, if an antibody specifically binds epitope "A," the presence of a polypeptide containing epitope A or the presence of free unlabeled epitope A will reduce the amount of labeled epitope A that binds to the antibody in a reaction containing free labeled epitope A and the antibody. Conversely, the presence of a polypeptide that does not contain epitope A will not reduce the amount of labeled epitope A that binds to the antibody. Highly specific binding indicates that the protein or peptide binds to its particular ligand, antibody, etc., and does not bind in a significant amount to other proteins present in the sample. Typically, a specific or selective reaction will be at least twice the background signal or noise and more typically more than 10 to 100 times the background signal or noise.

[116] "Stringent conditions" refer to conditions that permit hybridization between complementary polynucleotide sequences. Suitably stringent conditions can be defined by, for example, the concentrations of salt or formamide in the prehybridization and hybridization solutions, or by the hybridization temperature. Stringency can be increased by reducing the concentration of salt, increasing the concentration of formamide, or raising the hybridization temperature. Stringent conditions are dependent upon the type of probe as well as the length of the probe and the GC content of the probe. "Stringent conditions" typically

occur within a range from about $T_m - 5^\circ\text{C}$ (5°C below the melting temperature (T_m) of the probe) to about $T_m - 20 - 25^\circ\text{C}$ for a cRNA probe and to about $T_m - 15^\circ\text{C}$ for an oligonucleotide probe. "**Highly stringent conditions**" refers to conditions under which a probe will hybridize to its target sequence, typically in a complex mixture of nucleic acid sequences, but will not substantially hybridize to other sequences. One example of high stringency conditions for a cRNA probe that is 1,000 nucleotides in length and has a GC content of about 60% is about $55 - 65^\circ\text{C}$ in 50% formamide, 0.1 X SSC, and 200 $\mu\text{g/ml}$ sheared and denatured salmon sperm DNA. One example of low stringency conditions for the same probe in 50% formamide, 0.1 X SSC, and 200 $\mu\text{g/ml}$ sheared and denatured salmon sperm DNA would be $30 - 35^\circ\text{C}$. "**Very highly stringent conditions**" indicates that there must be complete identity between the sequences. The temperature range corresponding to a particular level of stringency can be narrowed further by calculating the purine to pyrimidine ratio of the nucleic acid of interest and adjusting the temperature accordingly. Variations on and modifications of the above ranges and conditions will be readily appreciated by those of skill in the art in view of the present application. As will be understood by those of skill in the art in view of the present application, the stringency of hybridization can be altered to identify or detect identical or related polynucleotide sequences. One guide for nucleic acid hybridization is Tijssen, Laboratory Techniques in Biochemistry and Molecular Biology-v.24 Hybridization with Nucleic Acid Probes, Part I "Overview of principles of hybridization and the strategy of nucleic acid assays" (New York: Elsevier 1993).

[117] "**Substantially purified**" refers to nucleic acid or amino acid sequences that are removed from their natural environment and are separated from other components from such natural environment, and are at least about 60% free, preferably about 75% or 85% free, and most preferably about 90%, 95% or 99% free from such other components with which they are naturally associated. Substantially purified preferably indicates a substantially homogeneous state and can be in either a dry or aqueous solution or other composition as desired. Purity and homogeneity can be assayed by standard methods, for example on a mass or molar basis, using analytical chemistry techniques such as polyacrylamide gel electrophoresis or high performance liquid chromatography.

[118] "Substitution" when referring to a change in a nucleotide or amino sequence indicates the replacement of one or more nucleotides or amino acids by different nucleotides or amino acids, respectively.

[119] "Variant," see Analog.

5 [120] "Western blotting" or "Western analysis" refers to a method for detecting specific protein sequences. For example, the process can be performed by electrophoresing a protein mixture in a denaturing agarose or acrylamide gel, transferring the mixture onto a membrane, and incubating it with an antibody raised against the protein of interest.

[121] Other terms and phrases are defined in other portions of this application.

10

C. SELECTION OF DESIRED ANTIGENIC PEPTIDES FOR GPCRs AND OTHER POLYPEPTIDES

[122] The present invention provides improved antigenic peptides, for example as set forth in Figure 2, SEQ ID NOS. 692-2292, and improved methods of identifying such
15 antigenic peptides from known or publicly available sequences of polypeptides or proteins, i.e., from a candidate polypeptide sequence. Polypeptide and protein are used in their traditional sense to indicate lengthy amino acid molecules, whereas the antigenic peptide has a length significantly less than the length of the corresponding polypeptide or protein such that the antigenic peptide is capable of providing significantly improved antigenicity relative
20 to the corresponding polypeptide or protein, typically improved specificity, affinity or avidity. The candidate polypeptide can be, for example, a human protein or polypeptide, a naturally occurring protein or polypeptide or a synthetic or recombinant protein or polypeptide.

[123] The antigenic peptides are typically 5 to about 100 amino acids in length, preferably
25 6 to about 50 amino acids, and further preferably 7 to about 20 amino acids. The antigenic peptides include short antigenic amino acid sequences (i.e., peptides comprising only a portion of an antigenic sequence as set forth in Figure 2 or as identified using the methods described herein, plus an insignificant number of additional amino acids at one or both ends, where insignificant indicates that the extra amino acids do not substantially interfere with the
30 antigenicity of the antigenic peptide). Such short antigenic peptides can be identical to at least 5, 6, 7 or more consecutive amino acids of the sequences herein or identified using the methods described herein, or can have one or two (or more, with increasing length)

conservative amino acid substitution for antigenic peptides comprising more than 6 or 7 consecutive amino acids of the sequences herein or identified using the methods described herein. Antigenic peptides and sequences, and related antibodies and assays and the like, are discussed further elsewhere herein with regard to GPCRs, but such discussions applies to all
5 antigenic peptides produced according to the methods herein, including proteins and polypeptides such as kinases, phosphatases and any other desired protein or polypeptide.

[124] The identification or selection methods comprise searching the candidate polypeptide sequence using a comparison window of the desired length, then selecting against or rejecting amino acid sequences of the length and having at least 1 characteristic
10 selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising no charged amino acids. Preferably, at least 5, 7, 8, or all of the characteristics are selected.

15 [125] The identification or selection methods can also comprise selecting against amino acid sequences having at least 5 consecutive amino acids that are identical to an alternative amino acid sequence from an alternative polypeptide, i.e., some polypeptide other than the candidate polypeptide from which the selected antigen was derived, that is different from the candidate polypeptide, posttranslational modification sites, or highly hydrophobic sequences,
20 which indicates sequences adequately hydrophobic to be located in a lipid membrane such as a cellular membrane. The posttranslational modification sites can be phosphorylation or glycosylation sites.

[126] The methods can further comprise performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence. Exemplary BLAST-type and FAST-type
25 analyses are described above, including BLAST, BLASTP, BLASTX, FASTA, and FASTX.

D. GENERAL DISCUSSION OF ANTIGENIC PEPTIDES RELATED TO PARTICULAR GPCRS

[127] ANTIGENIC PEPTIDES GENERALLY:

30 [128] The present invention includes antigenic peptides able to induce specific immunogenic responses, and corresponding binding partners. Such antigenic peptides and

binding partners can be cloned, expressed, isolated, purified, and otherwise obtained or manipulated according to routine methods known in the art in view of the present application.

[129] The present invention further relates to antigenic peptides having an amino acid sequence from a particular GPCR, including analogs, mimetics, fragments, derivatives, and the like of such antigenic peptides. See SEQ ID NOS. 1-2292, Figures 1-3. The antigenic peptides may be recombinant, natural or synthetic. The antigenic peptides include (i) antigenic peptides in which one or more of the amino acid residues are substituted with a conserved or non-conserved amino acid residue (preferably a conserved amino acid residue) and such substituted amino acid residue may or may not be one encoded by the genetic code, (ii) antigenic peptides in which one or more of the amino acid residues includes a substituent group, (iii) antigenic peptides in which the mature polypeptide is complexed (e.g., fused or otherwise bonded) with another compound, such as a compound to increase the half-life of the polypeptide (for example, polyethylene glycol), and (iv) antigenic peptides in which additional amino acids are fused to the antigenic peptide. Preparing and using such analogs, etc., are within the scope of those skilled in the art in view of the present application. The antigenic peptides additionally include antigenic peptides that have at least about 90% identity to the given antigenic peptide, and preferably at least about 95% identity to the antigenic peptide. The antigenic peptides additionally include antigenic peptides that contain at least five, six, seven or more consecutive amino acids that are identical to the given antigenic peptide, as well as antigenic peptides that contain at least six, seven, eight or more consecutive amino acids that are identical to the given antigenic except for one or two conservative changes within this such stretch of amino acids. The antigenic peptides of the present invention can be produced by peptide synthesis.

[130] EXPRESSION PROFILES BASED ON PROTEINS:

[131] An expression profile of a particular GPCR in one or more tissues can be made using antibodies or other binding partners produced using the antigenic peptides herein, then using traditional approaches such as Western blotting, immunohistochemistry analysis, protein array, ligand-binding studies, radioimmunoassay (RIA), and high performance liquid chromatography (HPLC), and immunohistochemistry analysis. H&E staining and other analyses can be used in combination with such immunologically-based analyses.

[132] SCREENING FOR ACTIVITY:

[133] The activity or functionality of an antigenic peptide can be measured using any of a variety of assays known in the art. Similarly, the specificity or affinity of an antibody or other binding partner made using the antigenic peptide can be measured using any of a variety of assays known in the art

5 [134] The activity or functionality of a particular GPCR may be measured using any of a variety of functional assays in which activation of the receptor in question results in an observable change in the level of some second messenger system, including but not limited to adenylyl cyclase, calcium mobilization, arachidonic acid release, ion channel activity, inositol phospholipid hydrolysis, or guanylyl cyclase. Heterologous expression systems utilizing
10 appropriate host cells to express the nucleic acid of the subject invention are used to obtain the desired second messenger coupling. Receptor activity may also be assayed in an oocyte expression system.

[135] PROTEIN PURIFICATION:

[136] The antigenic peptides and proteins or polypeptides containing them can be purified
15 by standard methods, including but not limited to salt or alcohol precipitation, preparative disc-gel electrophoresis, isoelectric focusing, high pressure liquid chromatography (HPLC), reversed-phase HPLC, gel filtration, cation and anion exchange, partition chromatography, and countercurrent distribution. Suitable purification methods will be readily apparent to those skilled in the art in view of the present application and are disclosed, *e.g.*, in Guide to
20 Protein Purification, Methods in Enzymology, Vol. 182, M. Deutscher, Ed., Academic Press, New York, NY (1990). Purification steps can be followed as part of carrying out assays for ligand binding activity. Particularly where a particular GPCR is being isolated from a cellular or tissue source, it is preferable to include one or more inhibitors of proteolytic enzymes in the assay system, such as phenylmethylsulfonyl fluoride (PMSF).

25

**E. CERTAIN ASSAYS, ANTIBODIES, PROBES, THERAPEUTICS, AND
OTHER SYSTEMS AND ASPECTS, OF THE INVENTION**

**1. SYSTEMS AND METHODS FOR SCREENING FOR A
PARTICULAR GPCR OR ANTIGENIC PEPTIDE**

30 **[137] SCREENING FOR ANTIGENIC PEPTIDES:**

[138] As noted elsewhere herein, the present invention provides antigenic peptides and antibodies that are specific for a particular GPCR. The invention also provides systems and

methods for using or detecting such peptides, and antibodies against such peptides or corresponding GPCRs in a sample. The assays are based on the detection of the antigenic peptides, typically as they are displayed by the particular GPCR, or the detection of antibodies produced against the particular antigenic peptides and corresponding GPCRs.

5 **[139] SCREENING FOR/WITH ANTIGENIC PEPTIDES:**

[140] Many assays are characterized by the ability of antigenic peptides for a particular GPCR to be bound by antibodies against them, and the ability of antibodies produced against such antigenic peptides to bind to antigens or epitopes of the particular GPCR in a sample. Some exemplary assays are described below and elsewhere herein.

10 **[141] LIST OF ASSAYS:**

[142] A variety of assays can detect antibodies that bind specifically to the desired protein in or from a sample, or detect a desired protein bound to one or more antibodies in or from the sample. Exemplary assays are described in detail in *Antibodies: A Laboratory Manual*, Harlow and Lane (eds.), Cold Spring Harbor Laboratory Press (1988). Representative
15 examples of such assays include: countercurrent immuno-electrophoresis (CIEP), radioimmunoassays, radioimmunoprecipitations, enzyme-linked immunosorbent assays (ELISA), dot blot assays, inhibition or competition assays, sandwich assays, immunostick (dip-stick) assays, simultaneous assays, immunochromatographic assays, immunofiltration assays, latex bead agglutination assays, immunofluorescent assays, biosensor assays, and
20 low-light detection assays. See U.S. Pat. Nos. 4,376,110 and 4,486,530; WO 94/25597; WO/25598.

[143] ENZYME-LINKED IMMUNOSORBENT ASSAYS (ELISA):

[144] One assay for the detection of a particular GPCR is a sandwich assay such as an enzyme-linked immunosorbent assay (ELISA). In one preferred embodiment, the ELISA
25 comprises the following steps: (1) coating the particular GPCR antigenic peptide onto a solid phase, (2) incubating a sample suspected of containing anti-particular GPCR antibodies with the antigenic peptide coated onto the solid phase under conditions that allow the formation of an antigen-antibody complex, (3) adding an anti-antibody (such as anti-IgG) conjugated with a label to be captured by the resulting antigen-antibody complex bound to the solid phase,
30 and (4) measuring the captured label and determining therefrom whether the sample contains anti-particular GPCR antibodies.

[145] IMMUNOFLUORESCENCE ASSAY:

[146] A fluorescent antibody test (FA-test) uses a fluorescently labeled antibody able to bind to one of the proteins of the invention. For detection, visual determinations are made by a technician using fluorescence microscopy, yielding a qualitative result. In one embodiment, this assay is used for the examination of tissue samples or histological sections.

5 [147] **BEAD AGGLUTINATION ASSAYS:**

[148] In latex bead agglutination assays, antibodies to one or more of the antigenic peptides of the present invention are conjugated to latex beads. The antibodies conjugated to the latex beads are then contacted with a sample under conditions permitting the antibodies to bind to desired proteins in the sample, if any. The results are then read visually, yielding a
10 qualitative result. In some embodiments, as with certain other assays, this format can be used in the field for on-site testing.

[149] **ENZYME IMMUNOASSAYS:**

[150] Enzyme immunoassays (EIA) include a number of different assays that can use the antibodies described in the present application. For example, a heterogeneous indirect EIA
15 uses a solid phase coupled with an antibody of the invention and an affinity purified, anti-IgG immunoglobulin preparation. The solid phase can be a polystyrene microtiter plate. The antibodies and immunoglobulin preparation are then contacted with the sample under conditions permitting antibody binding, which conditions are well known in the art. The results of such an assay can be read visually or using a device such as a spectrophotometer,
20 such as an ELISA plate reader, to yield a quantitative result. An alternative solid phase EIA format includes plastic-coated ferrous metal beads able to be moved during the procedures of the assay by means of a magnet. Yet another alternative is a low-light detection immunoassay format. In this highly sensitive format, the light emission produced by appropriately labeled bound antibodies are quantified automatically. Preferably, the reaction
25 is performed using microtiter plates.

[151] In an alternative embodiment, a radioactive tracer is substituted for the enzyme-mediated detection in an EIA to produce a radioimmunoassay (RIA).

[152] **SANDWICH ASSAY:**

[153] In a capture-antibody sandwich enzyme assay, the desired protein is bound between
30 an antibody attached to a solid phase, preferably a polystyrene microtiter plate, and a labeled antibody. The results can be measured, for example, using a spectrophotometer, such as an ELISA plate reader.

[154] SEQUENTIAL AND SIMULTANEOUS ASSAYS:

[155] In a sequential assay format, reagents are allowed to incubate with the capture antibody in a stepwise fashion. The test sample is first incubated with the capture antibody. Following a wash step, incubation with the labeled antibody occurs. In a simultaneous assay, the two incubation periods described in the sequential assay are combined. This eliminates one incubation period plus a wash step.

[156] IMMUNOSTICK (DIP-STICK) ASSAYS:

[157] A dipstick/immunostick format is essentially an immunoassay using a polystyrene paddle or dipstick instead of a polystyrene microtiter plate as the solid phase. Reagents are the same and the format can either be simultaneous or sequential.

[158] IMMUNOCHROMATOGRAPHIC ASSAYS:

[159] In a chromatographic strip test format, a capture antibody and a labeled antibody are dried onto a chromatographic strip, which typically comprises nitrocellulose or high porosity nylon bonded to cellulose acetate. The capture antibody is usually spray dried as a line at one end of the strip. At this end, there is an absorbent material that is in contact with the strip. At the other end of the strip, the labeled antibody is deposited in a manner that prevents it from being absorbed onto the membrane. Usually, the label attached to the antibody is a latex bead or colloidal gold. The assay may be initiated by applying the sample immediately in front of the labeled antibody.

[160] IMMUNOFILTRATION ASSAYS:

[161] Immunofiltration/immunoconcentration formats combine a large solid-phase surface with directional flow of sample/reagents, which concentrates and accelerates the binding of antigen to antibody. In an exemplary format, the test sample is preincubated with a labeled antibody, and then applied to a solid phase such as fiber filters, nitrocellulose membranes, or the like. The solid phase can also be precoated with latex or glass beads coated with capture antibody. Detection of analyte is the same as that in a standard immunoassay. The flow of sample/reagents can be modulated by either vacuum or the wicking action of an underlying absorbent material.

[162] BIOSENSOR ASSAYS:

[163] A threshold biosensor assay is a sensitive, instrumented assay amenable to screening large numbers of samples at low cost. In one embodiment, such an assay comprises the use of light-addressable potentiometric sensors wherein the reaction involves

the detection of a pH change due to binding of the desired protein by capture antibodies, bridging antibodies, and urease-conjugated antibodies. Upon binding, a pH change is effected that is measurable by translation into electrical potential (μ volts). The assay typically occurs in a very small reaction volume, and is very sensitive; the reported detection
5 limit of the assay is 1,000 molecules of urease per minute.

2. ANTIBODIES

[164] ANTIBODIES GENERATED AGAINST A PARTICULAR ANTIGENIC PEPTIDE AND ITS CORRESPONDING GPCR:

10 **[165]** Highly specific, high affinity or antibodies against a particular GPCR or other polypeptide can be generated using the antigenic peptides herein and using antibody generation techniques as described herein or elsewhere. The antibodies produced using the antigenic peptides of the present invention, for example, have a specificity for the corresponding GPCR such that the antibodies can selectively detect the corresponding GPCR
15 in a sample containing non-desired or contaminating proteins or polypeptides, such as a tissue or blood sample. Preferably, the antibodies have a high specificity such that no significant amounts of such proteins or polypeptides are detected, and further preferably have a specificity such that only insubstantial to essentially zero amounts of non-desirable proteins are detected. The antibodies produced using the antigenic peptides of the present invention,
20 for example, typically have an affinity or avidity constant (K_a) of at least about 10^7 liters/mole, typically a high affinity or avidity at least about 10^9 liters/mole, preferably at least about 10^{10} liters/mole, and further preferably at least about 10^{11} liters/mole.

[166] The antibodies can be used to conduct immunohistochemistry and other analyses of a variety of tissue samples to determine expression of a particular GPCR in such tissues, for
25 diagnostic assays, and for other desired purposes. The specification will now discuss a variety of antibody types, methods, uses, etc.

[167] ANTIBODIES GENERALLY:

[168] In some embodiments, the present invention provides antibodies and other binding partners created using the antigenic peptides herein and directed to a particular GPCR from
30 which the antigenic peptides were derived. Compositions and uses for such antibodies are contemplated, including diagnostic, medicament, and therapeutic uses. Various diagnostic, medicament, and therapeutic uses for antibodies have been reviewed above and, for example,

in Goldenberg et al., *Semin. Cancer Biol.*, 1(3):217-225 (1990); Beck et al., *Semin. Cancer Biol.*, 1(3):181-188 (1990); Niman, *Immunol. Ser.*, 53:189-204 (1990); Endo, *Nippon Igaku Hoshasen Gakkai Zasshi (Japan)*, 50(8):901-909 (1990); and, U.S. Pat. No. 6,214,984.

[169] Recognized immunoglobulin genes include the kappa, lambda, alpha, gamma, delta, epsilon, and mu constant region genes, as well as myriad immunoglobulin variable region genes. Light chains are classified as either kappa or lambda. Heavy chains are classified as gamma, mu, alpha, delta, or epsilon, which in turn define the immunoglobulin classes, IgG, IgM, IgA, IgD, and IgE, respectively. An exemplary immunoglobulin (antibody) structural unit comprises a tetramer. Each tetramer is composed of two identical pairs of antigenic peptide chains, each pair having one "light" chain (about 25 kD) and one "heavy" chain (about 50-70 kD). The N-terminus of each chain defines a variable region of about 100 to 110 or more amino acids primarily responsible for antigen recognition. The terms variable light chain (V_L) and variable heavy chain (V_H) refer to these light and heavy chains respectively.

15 [170] **ANTI-IDIOTYPIC ANTIBODIES:**

[171] The present invention encompasses anti-idiotypic antibodies, including polyclonal and monoclonal anti-idiotypic antibodies, that are produced using the antibodies described herein as antigens. These anti-idiotypic antibodies are useful because they may mimic the structures of the antigenic peptides set forth herein.

20 [172] Techniques for producing antibodies, including antibody fragments, include the following.

a. Antibody Preparation

(i) Polyclonal Antibodies

25 [173] **ANTIBODY PREP - POLYCLONAL:**

[174] Polyclonal antibodies are generally raised in animals by multiple subcutaneous (sc) or intraperitoneal (ip) injections of the relevant antigen and an adjuvant. It may be useful to conjugate the relevant antigen to a protein that is immunogenic in the species to be immunized, e.g., keyhole limpet hemocyanin, serum albumin, bovine thyroglobulin, or soybean trypsin inhibitor, using a bifunctional or derivatizing agent, for example, maleimidobenzoyl sulfosuccinimide ester (conjugation through cysteine residues), N-

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hydroxysuccinimide (through lysine residues), glutaraldehyde, succinic anhydride, SOCl_2 , or $\text{R}^1\text{N}=\text{C}=\text{NR}$, where R and R^1 are different alkyl groups.

[175] ANTIBODY PREP – ADJUVANTS (ALL ABS):

[176] Suitable adjuvants for the vaccination of animals for the production of polyclonal, monoclonal, and other antibodies include but are not limited to Adjuvant 65 (containing peanut oil, mannide monooleate, and aluminum monostearate); Freund's complete or incomplete adjuvant; mineral gels such as aluminum hydroxide, aluminum phosphate, and alum; surfactants such as hexadecylamine, octadecylamine, lysolecithin, dimethyldioctadecylammonium bromide, N,N-dioctadecyl-N',N'-bis(2-hydroxymethyl) propanediamine, methoxyhexadecylglycerol, and pluronic polyols; polyanions such as pyran, dextran sulfate, poly IC, polyacrylic acid, and carbopol; peptides such as muramyl dipeptide, dimethylglycine, tuftsin, stress proteins, core-containing proteins from a positive stranded RNA virus, *see* US Pat. No. 6,153,378; and, oil emulsions. The antigenic peptides could also be administered following incorporation into liposomes or other microcarriers.

[177] Information concerning adjuvants and various aspects of immunoassays are disclosed, *e.g.*, in the series by P. Tijssen, Practice and Theory of Enzyme Immunoassays, 3rd Edition (1987), Elsevier, New York. Other useful references covering methods for preparing polyclonal antisera include Microbiology, Hoeber Medical Division, Harper and Row (1969); Landsteiner, Specificity of Serological Reactions, Dover Publications, New York (1962); and, Williams, et al., Methods in Immunology and Immunochemistry, Vol. 1, Academic Press, New York (1967).

[178] Animals can be immunized against the antigen, immunogenic conjugates, or derivatives by combining 1 mg or 1 μg of the peptide or conjugate (for rabbits or mice, respectively) with 3 volumes of Freund's complete adjuvant and injecting the solution intradermally at multiple sites. One month later the animals are boosted with 1/5 to 1/10 the original amount of peptide or conjugate in Freund's complete adjuvant by subcutaneous injection at multiple sites. Seven to 14 days later the animals are bled and the serum is assayed for antibody titer. Animals are boosted until the titer plateaus. Preferably, the animal is boosted with the conjugate of the same antigen, but conjugated to a different protein or through a different cross-linking reagent. Conjugates also can be made in recombinant cell culture as protein fusions. In addition, aggregating agents such as alum can be suitably used to enhance the immune response.

(ii) Monoclonal Antibodies

[179] ANTIBODY PREP - MONOCLONAL:

[180] Monoclonal antibodies are obtained from a population of substantially homogeneous antibodies, *e.g.*, the individual antibodies comprising the population are identical except for possible naturally occurring mutations that may be present in minor amounts. For example, monoclonal antibodies can be made using the hybridoma method first described by Kohler and Milstein, *Nature*, 256:495 (1975), or can be made by recombinant DNA methods, or otherwise as desired.

[181] In the hybridoma method, a mouse, or other appropriate host animal, such as a hamster, is immunized as described herein to elicit lymphocytes that produce or are capable of producing antibodies that will bind specifically to the antigenic peptide used for immunization. Alternatively, lymphocytes may be immunized *in vitro*. Lymphocytes then are fused with myeloma cells using a suitable fusing agent, such as polyethylene glycol, to form a hybridoma cell, Goding, *Monoclonal Antibodies: Principles and Practice*, pp. 59-103, Academic Press (1986).

[182] The hybridoma cells thus prepared are seeded and grown in a suitable culture medium that preferably contains one or more substances that inhibit the growth or survival of the unfused, parental myeloma cells. For example, if the parental myeloma cells lack the enzyme hypoxanthine guanine phosphoribosyl transferase (HGPRT or HPRT), the culture medium for the hybridomas typically will include hypoxanthine, aminopterin, and thymidine (HAT medium), which substances prevent the growth of HGPRT-deficient cells.

[183] Preferred myeloma cells are those that fuse efficiently, support stable high-level production of antibody by the selected antibody-producing cells, and are sensitive to a medium such as HAT medium, for example murine myeloma lines, such as those derived from MOPC-21 and MPC-11 mouse tumors available from the Salk Institute Cell Distribution Center, San Diego, CA USA, and SP-2 cells available from the American Type Culture Collection, Rockville, MD USA. Human myeloma and mouse-human heteromyeloma cell lines have also been described for the production of human monoclonal antibodies, Kozbor, *J. Immunol.*, 133:3001 (1984); Brodeur et al., *Monoclonal Antibody Production Techniques and Applications*, pp. 51-63, Marcel Dekker, Inc., New York (1987).

[184] Culture medium in which hybridoma cells are growing is assayed for production of monoclonal antibodies directed against the antigenic peptide. The binding specificity of monoclonal antibodies produced by hybridoma cells can be determined by immunoprecipitation or by an *in vitro* binding assay, such as radioimmunoassay (RIA) or enzyme-linked immunosorbent assay (ELISA). The binding affinity of the monoclonal antibody can, for example, be determined by the Scatchard analysis of Munson and Pollard, Anal. Biochem., 107:220 (1980). The antibodies produced using the antigenic peptides of the present invention, for example, typically have an affinity or avidity constant (K_a) of at least about 10^7 liters/mole, typically a high affinity or avidity at least about 10^9 liters/mole, preferably at least about 10^{10} liters/mole, and further preferably at least about 10^{11} liters/mole.

[185] After hybridoma cells are identified that produce antibodies of the desired specificity, affinity, or activity, the clones may be subcloned by limiting dilution procedures and grown by standard methods (Goding, *supra*). Suitable culture media for this purpose include, for example, D-MEM or RPMI-1640 medium. In addition, the hybridoma cells may be grown *in vivo* as ascites tumors in an animal.

[186] The monoclonal antibodies secreted by the subclones are suitably separated from the culture medium, ascites fluid, or serum by conventional immunoglobulin purification procedures such as, for example, protein A-SEPHAROSETM, hydroxyapatite chromatography, gel electrophoresis, dialysis, or affinity chromatography.

[187] DNA encoding the monoclonal antibodies can be readily isolated and sequenced using conventional procedures (*e.g.*, by using oligonucleotide probes that are capable of binding specifically to genes encoding the heavy and light chains of murine antibodies). The hybridoma cells serve as a preferred source of such DNA. Once isolated, the DNA may be placed into expression vectors, which can then be transfected into host cells such as *E. coli* cells, simian COS cells, Chinese hamster ovary (CHO) cells, or myeloma cells that do not otherwise produce immunoglobulin protein, to obtain the synthesis of monoclonal antibodies in the recombinant host cells. Review articles on recombinant expression in bacteria of DNA encoding antibody include Skerra et al., Curr. Opinion in Immunol., 5:256-262 (1993), and Pluckthun, Immunol. Revs., 130:151-188 (1992).

[188] MOABS - COMBINATORIAL:

[189] In a further embodiment, antibodies or antibody fragments can be isolated from antibody phage libraries generated using the techniques described in McCafferty et al.,

Nature, 348:552-554 (1990), using the proper antigen such as CD11a, CD18, IgE, or HER-2 to select for a suitable antibody or antibody fragment. Clackson et al., Nature, 352:624-628 (1991) and Marks et al., J. Mol. Biol., 222:581-597 (1991) describe the isolation of murine and human antibodies, respectively, using phage libraries. Subsequent publications describe the production of high affinity (nM range) human antibodies by chain shuffling, Marks et al.,
5 Biotechnology, 10:779-783 (1992), as well as combinatorial infection and *in vivo* recombination as strategies for constructing very large phage libraries, Waterhouse et al., Nuc. Acids. Res., 21:2265-2266 (1993). Combinatorial antibodies are also discussed in Huse et al., Science 246:1275-1281 (1989), and Sastry et al., Proc. Natl. Acad. Sci. USA, 86:5728-
10 5732 (1989), and Alting-Mees et al., Strategies in Molecular Biology 3:1-9 (1990). These references describe a system commercially available from Stratacyte, La Jolla, CA USA. Briefly, mRNA is isolated from a B cell population and utilized to create heavy and light chain immunoglobulin cDNA expression libraries in the λ IMMUNOZAP(H) and λ IMMUNOZAP(L) vectors. These vectors may be screened individually or co-expressed to
15 form Fab fragments or antibodies, *see* Huse et al., *supra*; *see also* Sastry et al., *supra*. Positive plaques can subsequently be converted to a non-lytic plasmid, which allows for high-level expression of monoclonal antibody fragments from *E. coli*.

[190] HUMANIZED MOAB:

[191] Binding partners can also be constructed utilizing recombinant DNA techniques to
20 incorporate the variable regions of a gene that encode a specifically binding antibody. The construction of these binding partners can be readily accomplished by one of ordinary skill in the art in view of the present application. *See* Larrick et al., Biotechnology, 7:934-938 (1989); Riechmann et al., Nature, 332:323-327 (1988); Roberts et al., Nature, 328:731-734 (1987); Verhoeyen et al., Science 239:1534-1536 (1988); Chaudhary et al., Nature, 339:394-
25 397 (1989); *see also* U.S. Pat. No. 5,132,405 entitled "Biosynthetic Antibody Binding Sites".) For example, the DNA can be modified by substituting the coding sequence for human heavy- and light-chain constant domains in place of homologous murine sequences, U.S. Pat. No. 4,816,567; Morrison, et al., Proc. Nat. Acad. Sci., 81:6851 (1984), or by covalently joining to the immunoglobulin coding sequence all or part of the coding sequence for a non-
30 immunoglobulin polypeptide. In another example, DNA segments encoding the desired antigen-binding domains specific for the protein or peptide of interest are amplified from appropriate hybridomas and inserted directly into the genome of a cell that produces human

antibodies. *See* Verhoeyen et al., *supra*; *see also* Reichmann et al., *supra*. Some of these techniques transfer the antigen-binding site of a specifically binding mouse or rat monoclonal antibody or the like to a human antibody. Such antibodies can be preferable for therapeutic use in humans because they are typically not as antigenic as rat or mouse antibodies.

- 5 [192] In an alternative embodiment, genes that encode the variable region from a hybridoma producing a monoclonal antibody of interest can be amplified using oligonucleotide primers for the variable region. These primers may be synthesized by one of ordinary skill in the art, or may be purchased from commercially available sources. For instance, primers for mouse and human variable regions including, among others, primers for
- 10 $V_{H\alpha}$, $V_{H\beta}$, $V_{H\gamma}$, $V_{H\delta}$, C_{H1} , V_L , and C_L regions are available from Stratacyte (La Jolla, CA). These primers may be utilized to amplify heavy- or light-chain variable regions, which may then be inserted into vectors such as IMMUNOZAPTM(H) or IMMUNOZAPTM(L) (Stratacyte), respectively. These vectors may then be introduced into *E. coli* for expression. Utilizing these techniques, large amounts of a single-chain protein containing a fusion of the
- 15 V_H and V_L domains may be produced, *see* Bird et al., Science 242:423-426 (1988).

[193] ANTIBODY SUBSTITUTIONS - NON-IMMUNOGLOBULIN POLYPEPTIDES (ALL ABS):

- [194] Non-immunoglobulin polypeptides can be substituted in monoclonal and other antibodies described herein for the constant domains of an antibody, or they can be
- 20 substituted for the variable domains of one antigen-combining site of an antibody to create a chimeric bivalent antibody comprising one antigen-combining site having specificity for an antigen and another antigen-combining site having specificity for a different antigen.

[195] CHIMERICS:

- [196] Chimeric or hybrid antibodies can also be prepared *in vitro* using known methods in
- 25 synthetic protein chemistry, including those involving crosslinking agents, in view of the present application. For example, immunotoxins may be constructed using a disulfide-exchange reaction or by forming a thioether bond. Examples of suitable reagents for this purpose include iminothiolate and methyl-4-mercaptobutyrimidate.

[197] ANTIBODY LABELING (ALL ABS):

- 30 [198] For diagnostic applications or otherwise as desired, and for monoclonal and other antibodies described herein, the antibodies and other binding partners typically will be labeled with a detectable moiety. The detectable moiety can be any moiety that is capable of

producing, either directly or indirectly, a detectable signal. For example, the detectable moiety may be a radioisotope, such as ^3H , ^{14}C , ^{32}P , ^{35}S , or ^{125}I ; a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin; or an enzyme, such as alkaline phosphatase, beta-galactosidase, or horseradish peroxidase. Any method known in the art for conjugating the antibody or binding partner to the detectable moiety may be employed, including those methods described by Hunter et al., *Nature*, 144:945 (1962); David et al., *Biochemistry*, 13:1014 (1974); Pain et al., *J. Immunol. Meth.*, 40:219 (1981); and Nygren, J. *Histochem. Cytochem.*, 30:407 (1982).

(iii) Humanized And Human Antibodies

[199] HUMANIZED AB GENERALLY:

[200] Methods for humanizing non-human antibodies are well known in the art and have been discussed in part above. Generally, a humanized antibody has one or more amino acid residues introduced into it from a source which is non-human. These non-human amino acid residues are often referred to as "import" residues, which are typically taken from an "import" variable domain. Humanization can be performed essentially following the method of Winter and co-workers, Jones et al., *Nature*, 321:522-525 (1986); Riechmann et al., *Nature*, 332:323-327 (1988); Verhoeyen et al., *Science*, 239:1534-1536 (1988), by substituting rodent CDRs or CDR sequences for the corresponding sequences of a human antibody. Accordingly, such humanized antibodies are chimeric antibodies, U.S. Pat. No. 4,816,567, wherein substantially less than an intact human variable domain has been substituted by the corresponding sequence from a non-human species. In practice, humanized antibodies are typically human antibodies in which some CDR residues and possibly some FR residues are substituted by residues from analogous sites in rodent antibodies.

[201] The choice of human variable domains, both light and heavy, to be used in making humanized antibodies is very important to reduce antigenicity. According to the so-called "best-fit" method, the sequence of the variable domain of a rodent antibody is screened against the entire library of known human variable-domain sequences. The human sequence that is closest to that of the rodent is then accepted as the human framework (FR) for the humanized antibody. Sims et al., *J. Immunol.*, 151:2296 (1993); Chothia and Lesk, *J. Mol. Biol.*, 196:901 (1987). Another method uses a particular framework derived from the consensus sequence of all human antibodies of a particular subgroup of light or heavy chains.

The same framework may be used for several different humanized antibodies. Carter et al., Proc. Natl. Acad. Sci. USA, 89:4285 (1992); Presta et al., J. Immunol., 151:2623 (1993).

[202] It is typically desirable that antibodies be humanized with retention of high affinity for the antigen and other favorable biological properties. To achieve this goal, according to one method, humanized antibodies are prepared by a process of analysis of the parental sequences and various conceptual humanized products using three-dimensional models of the parental and humanized sequences. Three-dimensional immunoglobulin models are commonly available and are familiar to those skilled in the art. Computer programs are available that illustrate and display probable three-dimensional conformational structures of selected candidate immunoglobulin sequences. Inspection of these displays permits analysis of the likely role of the residues in the functioning of the candidate immunoglobulin sequence, *e.g.*, the analysis of residues that influence the ability of the candidate immunoglobulin to bind antigen. In this way, FR residues can be selected and combined from the consensus and import sequences so that the desired antibody characteristic, such as increased affinity for the target antigen(s), is achieved. In general, CDR residues are directly and most substantially involved in influencing antigen binding.

[203] It is also possible to produce transgenic animals (*e.g.*, mice) that are capable, upon immunization, of producing a full repertoire of human antibodies in the absence of endogenous immunoglobulin production. For example, it has been described that the homozygous deletion of the antibody heavy-chain joining region (J_H) gene in chimeric and germ-line mutant mice results in complete inhibition of endogenous antibody production. Transfer of the human germ-line immunoglobulin gene array in such germ-line mutant mice will result in the production of human antibodies upon antigen challenge. *See, e.g.*, Jakobovits et al., Proc. Natl. Acad. Sci. USA. 90:2551-255 (1993); Jakobovits et al., Nature, 362:255-258 (1993); Bruggemann et al., Year Immuno., 7:33 (1993). Human antibodies can also be produced in phage-display libraries, Hoogenboom and Winter, J. Mol. Biol., 227:381 (1991); Marks et al., J. Mol. Biol., 222:581 (1991).

(iv) Antibody Fragments

[204] **ANTIBODY FRAGMENTS:**

[205] Various techniques have been developed for the production of antibody fragments. Such fragments can be derived via proteolytic digestion of intact antibodies, *see, e.g.*,

Morimoto et al., J. Biochem. Biophys. Meth. 24:107-117 (1992) and Brennan et al., Science, 229:81 (1985). Fragments can also be produced directly by recombinant host cells. For example, antibody fragments can be isolated from antibody phage libraries discussed above. Fab'-SH fragments can be directly recovered from *E. coli* and chemically coupled to form
5 F(ab')₂ fragments, Carter et al., Biotechnology 10:163-167 (1992). F(ab')₂ fragments can be isolated directly from recombinant host cell culture. Other techniques for the production of antibody fragments will be apparent to the skilled practitioner.

(v) Bispecific Antibodies

10 [206] **BISPECIFIC ANTIBODIES GENERALLY:**

[207] Bispecific antibodies (BsAbs) are antibodies that have binding specificities for at least two different antigens. Bispecific antibodies can be derived from full-length antibodies or from antibody fragments, *e.g.*, F(ab')₂ bispecific antibodies.

[208] Methods for making bispecific antibodies are known in the art. Traditional
15 production of full-length bispecific antibodies is based on the coexpression of two immunoglobulin heavy chain-light chain pairs, where the two chains have different specificities, Millstein and Cuello, Nature, 305:537-539 (1983). Because of the random assortment of immunoglobulin heavy and light chains, these hybridomas (quadromas) produce a mixture of potentially 10 different antibody molecules, of which only one has the
20 correct bispecific structure. Purification of the correct molecule, which is usually accomplished by affinity chromatography steps, is rather cumbersome, and the product yields are low. Similar procedures are disclosed in WO 93/08829, and in Traunecker et al., E.M.B.O. J., 10:3655-3659 (1991).

[209] According to another approach, antibody variable domains containing the desired
25 binding specificities (antibody-antigen combining sites) are fused to immunoglobulin constant domain sequences. The fusion is preferably with an immunoglobulin heavy chain constant domain, comprising at least part of the hinge, C_H 2, and C_H 3 regions. It is preferred to have the first heavy-chain constant region (C_H 1) containing the site necessary for light chain binding, present in at least one of the fusions. DNAs encoding the immunoglobulin
30 heavy chain fusions and, if desired, the immunoglobulin light chain, are inserted into separate expression vectors, and are co-transfected into a suitable host organism. This provides for great flexibility in adjusting the mutual proportions of the three polypeptide fragments in

embodiments when unequal ratios of the three polypeptide chains used in the construction provide the improved yields. It is, however, possible to insert the coding sequences for two or all three polypeptide chains in one expression vector when the expression of at least two polypeptide chains in equal ratios results in high yields or when the ratios are of no particular significance.

[210] ANTIBODIES - HYBRID IMMUNOGLOBULIN HEAVY CHAIN:

[211] In one embodiment of this approach, the bispecific antibodies are composed of a hybrid immunoglobulin heavy chain with a first binding specificity in one arm, and a hybrid immunoglobulin heavy chain-light chain pair (providing a second binding specificity) in the other arm. This asymmetric structure may facilitate the separation of the desired bispecific compound from unwanted immunoglobulin chain combinations, as the presence of an immunoglobulin light chain in only one half of the bispecific molecule provides for a facile method of separation. This approach is discussed in WO 94/04690. For further details of generating bispecific antibodies see, for example, Suresh et al., Meth. Enzymol., 121:210 (1986).

[212] ANTIBODIES - CROSS-LINKED OR "HETEROCONJUGATE":

[213] Bispecific antibodies include cross-linked or "heteroconjugate" antibodies. For example, one of the antibodies in the heteroconjugate can be coupled to avidin, the other to biotin. Such antibodies have, for example, been proposed to target immune system cells to unwanted cells, U.S. Pat. No. 4,676,980), and for treatment of HIV infection, WO 91/00360, WO 92/200373, and EP 03089). Heteroconjugate antibodies may be made using any convenient cross-linking methods. Suitable cross-linking agents are well known in the art, and are disclosed in U.S. Pat. No. 4,676,980, along with a number of cross-linking techniques.

[214] ANTIBODIES - DIABODIES:

[215] The "diabody" technology described by Hollinger et al., Proc. Natl. Acad. Sci. USA, 90:6444-6448 (1993) has provided an alternative mechanism for making BsAb fragments. The fragments comprise a heavy-chain variable domain (V_H) connected to a light-chain variable domain (V_L) by a linker that is too short to allow pairing between the two domains on the same chain. Accordingly, the V_H and V_L domains of one fragment are forced to pair with the complementary V_L and V_H domains of another fragment, thereby forming two antigen-binding sites.

[216] Another strategy for making BsAb fragments by the use of single-chain Fv (sFv) dimers has also been reported. See Gruber et al., J. Immunol., 152:5368 (1994). These researchers designed an antibody comprising the V_H and V_L domains of a first antibody joined by a 25-amino-acid-residue linker to the V_H and V_L domains of a second antibody.

5 The refolded molecule bound to fluorescein and the T-cell receptor and redirected the lysis of human tumor cells that had fluorescein covalently linked to their surface.

[217] **ANTIBODIES - OTHER:**

[218] Techniques for generating bispecific antibodies from antibody fragments have also been described in the literature. For example, bispecific antibodies can be prepared using
10 chemical linkage. Brennan et al., Science, 229:81 (1985) describe a procedure wherein intact antibodies are proteolytically cleaved to generate F(ab')₂ fragments. These fragments are reduced in the presence of the dithiol complexing agent sodium arsenite to stabilize vicinal dithiols and prevent intermolecular disulfide formation. The Fab' fragments generated are then converted to thionitrobenzoate (TNB) derivatives. One of the Fab'-TNB derivatives is
15 then reconverted to the Fab'-thiol by reduction with mercaptoethylamine and is mixed with an equimolar amount of the other Fab'-TNB derivative to form the BsAb. The BsAbs produced can be used as agents for the selective immobilization of enzymes.

[219] Fab'-SH fragments can be directly recovered from *E. coli*, which can be chemically coupled to form bispecific antibodies. Shalaby et al., J. Exp. Med., 175:217-225 (1992)
20 describe the production of a fully humanized BsAb F(ab')₂ molecule. Each Fab' fragment was separately secreted from *E. coli* and subjected to directed chemical coupling *in vitro* to form the BsAb. The BsAb thus formed was able to bind to cells overexpressing the HER2 receptor and normal human T cells, as well as trigger the lytic activity of human cytotoxic lymphocytes against human breast tumor targets. See also Rodriguez et al., Int. J. Cancers
25 (Suppl.) 7:45-50 (1992).

[220] Various techniques for making and isolating BsAb fragments directly from recombinant cell culture have also been described. For example, bispecific F(ab')₂ heterodimers have been produced using leucine zippers. Kostelny et al., J. Immunol., 148(5):1547-1553 (1992). The leucine zipper peptides from the Fos and Jun proteins are
30 linked to the Fab' portions of two different antibodies by gene fusion. The antibody homodimers are reduced at the hinge region to form monomers and then re-oxidized to form the antibody heterodimers.

b. Antibody Purification

[221] ANTIBODY PURIFICATION GENERALLY:

[222] When using recombinant techniques, the antibody can be produced intracellularly, in the periplasmic space, or directly secreted into the medium. If the antibody is produced intracellularly, as a first step, the particulate debris, either host cells or lysed fragments, is removed, for example, by centrifugation or ultrafiltration. Carter et al., Bio/Technology 10:163-167 (1992), describe a procedure for isolating antibodies which are secreted to the periplasmic space of *E. coli*. Briefly, cell paste is thawed in the presence of sodium acetate (pH 3.5), EDTA, and phenylmethylsulfonylfluoride (PMSF) over about 30 min. Cell debris can be removed by centrifugation. Where the antibody is secreted into the medium, supernatants from such expression systems are generally first concentrated using a commercially available protein concentration filter, for example, an Amicon or Millipore Pellicon ultrafiltration unit. A protease inhibitor such as PMSF may be included in any of the foregoing steps to inhibit proteolysis and antibiotics may be included to prevent the growth of adventitious contaminants.

[223] BEFORE LPHIC:

[224] The antibody composition prepared from the cells is preferably subjected to at least one purification step prior to LPHIC. Examples of suitable purification steps include hydroxyapatite chromatography, gel electrophoresis, dialysis, and affinity chromatography. The suitability of protein A as an affinity ligand depends on the species and isotype of any immunoglobulin Fc domain that is present in the antibody. Protein A can be used to purify antibodies that are based on human $\gamma 1$, $\gamma 2$, or $\gamma 4$ heavy chains, Lindmark et al., J. Immunol. Meth. 62:1-13 (1983). Protein G has been recommended for mouse isotypes and for human $\gamma 3$, Guss et al., E.M.B.O. J., 5:1567-1575 (1986). The matrix to which the affinity ligand is attached is often agarose, but other matrices are available. Mechanically stable matrices such as controlled pore glass or poly(styrenedivinyl)benzene allow for faster flow rates and shorter processing times than can be achieved with agarose. Where the antibody comprises a $C_H 3$ domain, the Bakerbond ABXTM resin (J. T. Baker, Phillipsburg, N.J.) is useful for purification. Other techniques for protein purification such as fractionation on an ion-exchange column, ethanol precipitation, Reverse Phase HPLC, chromatography on silica, chromatography on heparin SEPHAROSETM, chromatography on an anion or cation

exchange resin (such as a polyaspartic acid column), chromatofocusing, SDS-PAGE, and ammonium sulfate precipitation are also available depending on the antibody to be recovered.

[225] LPHIC:

[226] Following any preliminary purification step(s), the mixture comprising the antibody of interest and contaminant(s) can be subjected to LPHIC. *See* US Patent No. 6,214,984. Often, the antibody composition to be purified will be present in a buffer from the previous purification step. However, it may be necessary to add a buffer to the antibody composition prior to the LPHIC step. Many buffers are available and can be selected by routine experimentation. The pH of the mixture comprising the antibody to be purified and at least one contaminant in a loading buffer is adjusted to a pH of about 2.5-4.5 using either an acid or base, depending on the starting pH. The loading buffer can have a low salt concentration (*e.g.*, less than about 0.25 M salt).

[227] The mixture is loaded on the HIC column. HIC columns normally comprise a base matrix (*e.g.*, cross-linked agarose or synthetic copolymer material) to which hydrophobic ligands (*e.g.*, alkyl or aryl groups) are coupled. One example of an HIC column comprises an agarose resin substituted with phenyl groups (*e.g.*, a Phenyl SEPHAROSE™ column). Many HIC columns are available commercially. Examples include, but are not limited to, Phenyl SEPHAROSE 6 FAST FLOW™ column with low or high substitution (Pharmacia LKB Biotechnology, AB, Sweden); Phenyl SEPHAROSE™ High Performance column (Pharmacia LKB Biotechnology, AB, Sweden); Octyl SEPHAROSE™ High Performance column (Pharmacia LKB Biotechnology, AB, Sweden); FRACTOGEL™ EMD Propyl or FRACTOGEL™ EMD Phenyl columns (E. Merck, Germany); MACRO-PREP™ Methyl or MACRO-PREP™ t-Butyl Supports (Bio-Rad, California); WP HI-Propyl (C₃)™ column (J. T. Baker, New Jersey); and TOYOPEARL™ ether, phenyl, or butyl columns (TosoHaas, PA).

[228] The antibody is typically eluted from the column using an elution buffer that is the same as the loading buffer. The elution buffer can be selected using routine experimentation in view of the present application. The pH of the elution buffer may be between about 2.5-4.5 and have a low salt concentration (*e.g.*, less than about 0.25 M salt). It may not be necessary to use a salt gradient to elute the antibody of interest; the desired product may be recovered in the flow-through fraction that does not bind significantly to the column.

[229] The LPHIC step provides a way to remove a correctly folded and disulfide bonded antibody from unwanted contaminants (*e.g.*, incorrectly associated light and heavy fragments). The method can provide an approach to substantially remove an impurity characterized as a correctly folded antibody fragment whose light and heavy chains fail to
5 associate through disulfide bonding. Antibody compositions prepared using LPHIC can be up to about 95% pure or more. Purities of more than about 98% have been reported. US Patent No. 6,214,984.

[230] **POST LPHIC:**

[231] Antibody compositions prepared by LPHIC can be further purified as desired using
10 techniques which are well known in the art. Diagnostic or therapeutic formulations of the purified protein can be made by providing the antibody composition in a physiologically acceptable carrier, examples of which are provided below. To remove contaminants (*e.g.*, unfolded antibody and incorrectly associated light and heavy fragments) from the HIC column so that it can be re-used, a composition including urea (*e.g.*, 6.0 M urea, 1% MES
15 buffer pH 6.0, 4 mM ammonium sulfate) can be flowed through the column.

c. Some Uses For Antibodies Described Herein

(i) Generally

[232] **GENERALLY:**

20 [233] The present invention comprises any suitable use for the antibodies and other binding partners discussed herein. The following provides some of the desired uses, including diagnostic and therapeutic uses. Various diagnostic and therapeutic uses for antibodies have been reviewed in Goldenberg et al., *Semin. Cancer Biol.*, 1(3):217-225 (1990); Beck et al., *Semin. Cancer Biol.*, 1(3):181-188 (1990); Niman, *Immunol. Ser.* 53:189-
25 204 (1990); and, Endo, *Nippon Igaku Hoshasen Gakkai Zasshi (Japan)* 50(8):901-909 (1990), for example.

[234] **ASSAYS:**

[235] The antibodies can be used in immunoassays, such as enzyme immunoassays. BsAbs can be useful for this type of assay; one arm of the BsAb can be designed to bind to a
30 specific epitope on the enzyme so that binding does not cause enzyme inhibition, the other arm of the antibody can be designed to bind to an immobilizing matrix ensuring a high enzyme density at the desired site. Examples of such diagnostic BsAbs include those having

specificity for IgG as well as ferritin, and those having binding specificities for horseradish peroxidase (HRP) as well as a hormone, for example. Monoclonal and polyclonal antibodies are also exemplary antibodies for immunoassays.

[236] The antibodies can be designed for use in two-site immunoassays. For example, two antibodies are produced binding to two separate epitopes on the analyte protein; one antibody binds the complex to an insoluble matrix, the other binds an indicator enzyme.

[237] **DIAGNOSTIC USES:**

[238] Antibodies can also be used for immunodiagnosis, *in vitro* or *in vivo* or otherwise, of various diseases or conditions based on the presence or absence of a particular GPCR. Such diseases and conditions include, *e.g.*, immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological-related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (*e.g.*, osteoarthritis, osteoporosis), carcinoma (*e.g.*, basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and

cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved.

- 5 [239] To facilitate this diagnostic use, an antibody that binds a particular GPCR, when such is differentially expressed in tumors or other target diseases, can be conjugated with a detectable marker (*e.g.*, a chelator that binds a radionuclide). Examples of tumor-associated antigens being used in a similar fashion include an antibody having specificity for the tumor-associated antigen CEA used for imaging colorectal and thyroid carcinomas and the anti-
10 p185^{HER2} antibody used for detecting cancers characterized by amplification of the HER2 protooncogene. Other uses for the antibodies of the present invention will be apparent to the skilled practitioner in view of the present application.

(ii) Assays

15 [240] ASSAYS:

[241] For certain applications such as some diagnostic and other assay applications, the antibody typically can be labeled directly or indirectly with a detectable moiety. The detectable moiety can be any moiety that is capable of producing, either directly or indirectly, a detectable signal. For example, the detectable moiety may be a radioisotope, such as ³H,
20 ¹⁴C, ³²P, ³⁵S, or ¹²⁵I; a fluorescent or chemiluminescent compound, such as fluorescein isothiocyanate, rhodamine, or luciferin; or an enzyme, such as alkaline phosphatase, beta-galactosidase, or HRP.

[242] Any method known in the art for separately conjugating the antibody to the detectable moiety may be employed, including those methods described by Hunter et al.,
25 Nature, 144:945 (1962); David et al., Biochemistry, 13:1014 (1974); Pain et al., J. Immunol. Meth. 40:219 (1981); and, Nygren, J. Histochem. and Cytochem. 30:407 (1982).

[243] The antibodies of the present invention may be employed in any desired assay method, such as competitive binding assays, direct, and indirect sandwich assays, and immunoprecipitation assays. Zola, Monoclonal Antibodies: A Manual of Techniques, pp.
30 147-158 (CRC Press, Inc. (1987).

[244] COMPETITIVE BINDING ASSAYS:

[245] Competitive binding assays rely on the ability of a labeled standard to compete with the test sample analyte for binding with a limited amount of antibody. The amount of analyte in the test sample is inversely proportional to the amount of standard that becomes bound to the antibody. To facilitate determining the amount of standard that becomes bound, the antibody generally is insolubilized before or after the competition, so that the standard, and analyte that are bound to the antibody may conveniently be separated from the standard, and analyte which remain unbound.

[246] BsAbs are particularly useful for sandwich assays which involve the use of two molecules, each capable of binding to a different immunogenic portion, or epitope, of the sample to be detected. In a sandwich assay, the test sample analyte is bound by a first arm of the antibody which is immobilized on a solid support, and thereafter a second arm of the antibody binds to the analyte, thus forming an insoluble three part complex. *See, e.g.*, U.S. Pat. No. 4,376,110. The second arm of the antibody may itself be labeled with a detectable moiety (direct sandwich assays) or may be measured using an anti-immunoglobulin antibody that is labeled with a detectable moiety (indirect sandwich assay). For example, one type of sandwich assay is an ELISA assay, in which case the detectable moiety is an enzyme. Assays are discussed further elsewhere herein in relation to binding partners such as antibodies, and antigenic peptides for particular GPCRs, including assays searching for or using such antigenic peptides, and would be apparent to those skilled in the art in view of the present application.

(iii) Affinity Purification

[247] AFFINITY PURIFICATION:

[248] The antibodies also are useful for the affinity purification of an antigen of interest such as a particular GPCR from sources such as recombinant cell culture or natural sources.

(iv) Therapeutics

[249] THERAPEUTIC USES:

[250] Therapeutic compositions, and uses, etc., for the antibodies described herein will now be discussed. As with other parts of this application, this section does not contain the entire discussion of therapeutic uses or compositions, etc., for antibodies; other sections discuss both antibodies, and therapeutics, and the discussion in this section applies to certain

other aspects discussed herein. Turning to antibodies and therapeutics, the antibodies can be used, for example, for redirected cytotoxicity (*e.g.*, to kill tumor cells), as a vaccine adjuvant, for delivering thrombolytic agents to clots, for delivering immunotoxins to tumor cells, for converting enzyme activated prodrugs at a target site (*e.g.*, a tumor), for treating infectious
5 diseases or targeting immune complexes to cell surface receptors.

[251] THERAPEUTIC FORMULATIONS:

[252] Therapeutic formulations of the antibody can be prepared for storage by mixing the antibody having the desired degree of purity with optional physiologically acceptable carriers, excipients, or stabilizers (Remington's Pharmaceutical Sciences, 16th edition, Osol,
10 A., Ed. (1980), for example in the form of lyophilized cake or aqueous solutions. Acceptable carriers, excipients, or stabilizers are nontoxic to recipients at the dosages, and concentrations employed, and include buffers such as phosphate, citrate, and other organic acids; antioxidants including ascorbic acid; low molecular weight (less than about 10 residues) polypeptides; proteins, such as serum albumin, gelatin, or immunoglobulins; hydrophilic
15 polymers such as polyvinylpyrrolidone; amino acids such as glycine, glutamine, asparagine, arginine, or lysine; monosaccharides, disaccharides, and other carbohydrates including glucose, mannose, or dextrans; chelating agents such as EDTA; sugar alcohols such as mannitol or sorbitol; salt-forming counterions such as sodium; or nonionic surfactants such as Tween, Pluronic, or polyethylene glycol (PEG).

[253] The antibodies also may be entrapped in microcapsules prepared, for example, by coacervation techniques or by interfacial polymerization (for example, hydroxymethylcellulose or gelatin-microcapsules, and poly-[methylmethacrylate] microcapsules, respectively), in colloidal drug delivery systems (for example, liposomes, albumin microspheres, microemulsions, nano-particles, and nanocapsules), or in
25 macroemulsions. Such techniques are disclosed in Remington's Pharmaceutical Sciences, *supra*.

[254] THERAPEUTIC FORMULATIONS -STERILE:

[255] An antibody to be used for *in vivo* human administration should be sterile. This can be accomplished by filtration through sterile filtration membranes, for example prior to or
30 following lyophilization and reconstitution. The antibody ordinarily will be stored in lyophilized form or in solution. Therapeutic antibody compositions generally are placed into

a container having a sterile access port, for example, an intravenous solution bag or vial having a stopper pierceable by a hypodermic injection needle.

[256] THERAPEUTIC ADMINISTRATIONS:

[257] The route of antibody administration is in accord with known methods, *e.g.*,
5 injection or infusion by intravenous, intraperitoneal, intracerebral, intramuscular, intraocular, intraarterial, or intralesional routes, or by sustained release systems as noted below.

[258] The antibody can be administered, for example, continuously by infusion or by bolus injection. Suitable examples of sustained-release preparations include semipermeable matrices of solid hydrophobic polymers containing the protein, which matrices are in the
10 form of shaped articles, *e.g.*, films, or microcapsules. Examples of sustained-release matrices include polyesters, hydrogels (*e.g.*, poly(2-hydroxyethyl-methacrylate) as described by Langer et al., J. Biomed. Mater. Res., 15:167-277 (1981), and Langer, Chem. Tech., 12:98-105 (1982), or poly(vinylalcohol)), polylactides, U.S. Pat. No. 3,773,919; EP 58,481, copolymers of L-glutamic acid and gamma ethyl-L-glutamate, Sidman et al., Biopolymers,
15 22:547-556 (1983), non-degradable ethylene-vinyl acetate, Langer et al., *supra*, degradable lactic acid-glycolic acid copolymers such as the LUPRON DEPOT™ (injectable microspheres composed of lactic acid-glycolic acid copolymer and leuprolide acetate), and poly-D-(-)-3-hydroxybutyric acid, EP 133,988.

**[259] THERAPEUTIC ADMINISTRATIONS - SUSTAINED RELEASE-
20 POLYMERS:**

[260] While polymers such as ethylene-vinyl acetate and lactic acid-glycolic acid sustain release of molecules for over 100 days, certain hydrogels release proteins for shorter time periods. When encapsulated antibodies remain in the body for a long time, they may denature or aggregate as a result of exposure to moisture at 37°C, resulting in a loss of
25 biological activity and possible changes in immunogenicity. Rational strategies can be devised for antibody stabilization depending on the mechanism involved. For example, if the aggregation mechanism is discovered to be intermolecular S-S bond formation through thio-disulfide interchange, stabilization may be achieved by modifying sulfhydryl residues, lyophilizing from acidic solutions, controlling moisture content, using appropriate additives,
30 and developing specific polymer matrix compositions.

[261] THERAPEUTIC ADMINISTRATIONS - SUSTAINED RELEASE-LIPOSOMES:

[262] Sustained-release antibody compositions also include liposomally entrapped antibody. Liposomes containing the antibody can be prepared by methods such as those in DE 3,218,121; Epstein et al., Proc. Natl. Acad. Sci. USA, 82:3688-3692 (1985); Hwang et al., Proc. Natl. Acad. Sci. USA, 77:4030-4034 (1980); EP 52,322; EP 36,676; EP 88,046; EP 5 143,949; EP 142,641; Japanese patent application 83-118008; U.S. Pat. Nos. 4,485,045 and 4,544,545; and EP 102,324. Ordinarily the liposomes are of the small (about 200-800 Angstroms) unilamellar type in which the lipid content is greater than about 30 mol. % cholesterol, the selected proportion being adjusted for the optimal antibody therapy.

[263] **THERAPEUTICALLY EFFECTIVE AMOUNT:**

10 [264] An effective amount of antibody to be employed therapeutically will depend, for example, upon the therapeutic objectives, the route of administration, and the condition of the patient. Accordingly, it will be necessary for the therapist to titer the dosage and modify the route of administration as required to obtain the optimal therapeutic effect. A typical daily dosage might range from about 1 µg/kg to up to 10 mg/kg or more, depending on the factors 15 mentioned above. Typically, the clinician will administer antibody until a dosage is reached that achieves the desired effect. The progress of this therapy is easily monitored by conventional assays.

5. DRUG DESIGN BASED ON THE ANTIGENS HEREIN OR
20 ANTIBODIES THERETO

[265] **DISEASE/CONDITIONS LIST:**

[266] The peptides and antibodies of the present invention can serve as valuable tools for designing drugs for treating various pathophysiological conditions such as immune-related diseases, cell growth-related diseases, cell regeneration-related diseases, immunological- 25 related cell proliferative diseases, and autoimmune diseases. Examples of specific diseases include AIDS, allergies, Alzheimer's disease, amyotrophic lateral sclerosis, atherosclerosis, bacterial, fungal, protozoan and viral infections, benign prostatic hypertrophy, bone diseases (e.g., osteoarthritis, osteoporosis), carcinoma (e.g., basal cell carcinoma, breast carcinoma, embryonal carcinoma, ovarian carcinoma, renal cell carcinoma, lung adenocarcinoma, lung 30 small cell carcinoma, pancreatic carcinoma, prostate carcinoma, transitional carcinoma of the bladder, squamous cell carcinoma, thyroid carcinoma), cardiomyopathy, chronic and acute inflammation, circadian rhythm disorders, COPD, Crohn's disease, diabetes, Duchenne

muscular dystrophy, embryonal carcinoma, endotoxic shock, environmental stress (*e.g.*, by heat, UV or chemicals), gastrointestinal disorders, glioblastoma multiform, graft vs. host disease, Hodgkin's disease, inflammatory bowel disease, ischemia, stroke, lymphoma, macular degeneration, malignant cytokine production, malignant fibrous histiocytoma, melanoma, meningioma, mesothelioma, multiple sclerosis, nasal congestion, pain, Parkinson's disease, prostate carcinoma, psoriasis, rhabdomyosarcoma, psychotic or neurological disorders (*e.g.*, anxiety, depression, schizophrenia, dementia, mental retardation, memory loss, epilepsy, locomotor problems, respiratory disorders, asthma, eating/body weight disorders including obesity, bulimia, diabetes, anorexia, nausea, hypertension, hypotension), renal disorders, reperfusion injury, rheumatoid arthritis, sarcoma (*e.g.*, chondrosarcoma, Ewing's sarcoma, osteosarcoma), septicemia, seminoma, sexual/reproductive disorders, tonsil, transitional carcinoma of the bladder, transplant rejection, trauma, tuberculosis, ulcers, ulcerative colitis, urinary retention, vascular and cardiovascular disorders, or any other disease or disorder in which G protein-coupled receptors are involved, as well as learning and/or memory disorders, diabetes, pain perception disorders, anorexia, obesity, hormonal release problems, or any other disease or disorder in which a specific GPCR is involved or that would be readily apparent to those skilled in the art in view of the present application.

EXAMPLES

[267] The Examples below provide information as follows: Example 1 relates to the identification and selection of the antigens set forth in Figure 2. Examples 2 to 4 relate to antibody production and purification based on such antigens. Examples 5 to 10 relate to H&E staining. And, Example 11 relates to Western blot analyses.

EXAMPLE 1: SELECTION OF ANTIGENS

[268] Antigenic peptides were derived from the amino acid sequence of a particular GPCR based on analyses of likely antigen-containing regions and specificity of those regions for the protein/gene of interest. The specificity of the antigen peptides (approximately 20 amino acids in length) for antibody generation was determined using the outlined techniques, including BLAST of several public databases. These public databases included but were not limited to GenBank, Swiss Prot Human, Swiss Prot NonHuman, GenPeptH, GenPept M, and

LifeSpan's proprietary databases. With respect to specificity, parameters that precluded the use of a particular peptide included the presence of 6 or more contiguous amino acids with sequence identity to protein(s) other than the protein of interest, the presence of sites of posttranslational modification, including phosphorylation and glycosylation, and highly hydrophobic sequences, which could indicate potential *in situ* localization within the plasma membrane. The peptides were analyzed for antigenicity using the published algorithm of Hopp, T. P., and Woods, K. R, Proc. Natl. Acad. Sci. U.S.A. 78, 3824-3828, (1981). Additional considerations in antigenic peptide design included 1) selection against sequences with multiple prolines in a row, 2) selection against sequences with multiple serines in a row, 3) selection against sequences with multiple lysines in a row, 4) selection against sequences with multiple arginines in a row 5) selection against sequences with multiple aspartic acids in a row, 6) selection against sequences with multiple glutamic acids in a row, 7) selection against peptides containing methionine or tryptophan, which can become oxidized as a result of the cyclization reaction, and 8) avoidance of stretches of 5 or more amino acids having no uncharged amino acids (which also resulted in a desirable charge to peptide length ratio of at least 1 charge:5 residues). The selected antigenic peptides are set forth in the Sequence Listing and in Figure 2.

EXAMPLE 2: ANTIBODY PRODUCTION SCHEDULE

- [269] Day 0 - Pre-immune serum collection (approximately 5.0 ml). Immunize using 200 µg antigen peptide per rabbit in Complete Freund's Adjuvant.
- [270] Day 14 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [271] Day 28 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [272] Day 42 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [273] Day 49 - First production bleed; obtain 24.0 - 26.0 ml.
- [274] Day 56 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.
- [275] Day 63 - Second production bleed and ELISA analysis.

[276] Day 70 - Immunize using 100 µg antigen per rabbit in Incomplete Freund's Adjuvant.

[277] Day 77 - Third production bleed and affinity purification.

5 **EXAMPLE 3: IMMUNOSORBENT PURIFICATION OF ANTISERUM:
 COUPLING OF PEPTIDE TO CNBR-ACTIVATED SEPHAROSE 4B**

[278] Weigh out 0.8 g of CNBr-activated Sepharose 4B (2.5 ml of final gel volume). Wash and re-swell on sintered glass filter with 1 mM HCl, followed by coupling buffer (0.1 M NaHCO₃, 0.25 M NaCl, pH 8.5). Dissolve 10 mg of protein or peptide in coupling buffer.
10 Mix protein solution with gel suspension and incubate 2 hours at room temperature or overnight at 4°C. Block remaining active groups with 0.2 M glycine buffer, pH 8.1. Wash away excess adsorbed protein with coupling buffer, followed by 0.1 M acetate buffer containing 0.5 M NaCl, pH 4.3. Equilibrate the column with phosphate-buffered saline (PBS), pH 7.7.

15 **EXAMPLE 4: IMMUNOSORBENT PURIFICATION OF ANTISERUM:
 AFFINITY PURIFICATION OF ANTISERUM**

[279] Dilute 10 ml of clear antiserum 1:1 with PBS, pH 7.7, apply to affinity column at a flow rate of 0.3 ml/minute, and monitor absorbance of eluate at 280 nm. Collect fractions of
20 unbound material and rinse column with PBS, pH 7.7. Elute bound antibody with 0.2 M glycine, pH 1.85, and collect eluate until absorbance at 280 nm returns to baseline. Neutralize all collected fractions with 1 M Tris-HCl, pH 8.5 immediately after collection. Determine OD at 280 nm, and determine the total OD recovered. Conduct ELISA analysis with the corresponding antigen to confirm the presence and identity of recovered antibody
25 and the removal of all antibody from the original serum. Concentrate antibody to approximately 2.0 mg/ml and dialyze against PBS with 0.01% NaN₃.

EXAMPLE 5: PREPARATION OF ANTIBODY DILUTIONS

[280] The purpose of this protocol is to dilute antibodies in solution. Materials include
30 Tris-HCL Buffer with carrier protein and 0.015 M NaN₃ (Dako Antibody Diluent #S0809 (DAKO, Carpinteria, CA); vials containing the antibodies described above or commercial antibodies against the particular GPCR; pipetmen and disposable tips; container of chopped ice; 12 ml Dako reagent tubes; and, reagent tube rack.

- [281] The procedure is a) calculate proportions of antibody and diluent according to desired concentrations and volume requirements; b) label reagent tubes and place in rack; c) pipette needed volume of diluent into tube(s); d) place vials of antibodies into ice; e) invert and/or flick antibody vial(s) 3 or 4 times to insure suspension; f) pipette required volume of antibody(s) into corresponding diluent volumes; and, g) mix gently.

EXAMPLE 6: PREPARATION OF AUTOSTAINER SOLUTIONS

- [282] The purpose of this protocol is the preparation of concentrated solutions for use in a DAKO autostainer. Materials include DAKO[®] TBST (Tris Buffered Saline Containing Tween-S3306), 10X Concentrate, DAKO[®] Target Retrieval Solution, 10x Concentrate (S1699), deionized H₂O, 20L container, with lid, marked at the 10L level, DAKO[®] TBS (Tris Buffered Saline-S1968), and DAKO Tween[®] (S1966).

- [283] The procedure to make TBST 10x Concentrate is a) pour 2 500 ml bottles DAKO[®] TBST into a 20 L container, b) add deionized H₂O until solution level is at 10 L mark, c) replace lid and shake 10 to 20 times, d) pour diluted DAKO[®] TBST into autostainer carboy(s) as designated. The procedure to make Target Retrieval Solution is a) measure 135 ml of deionized H₂O and pour into slide bath, b) measure 15 ml of DAKO[®] Target Retrieval solution, c) add to H₂O, and d) agitate. This solution is then used in the steam method of target retrieval, Example 9, below. The procedure to make TBS is a) fill 20L container to 10L mark with deionized H₂O, b) add 2 envelopes of DAKO[®] TBS, c) add 5 ml of DAKO TWEEN[®], and d) replace lid and agitate 10 to 20 times.

EXAMPLE 7: PREPARATION OF SOLUTIONS FOR ANTIBODY DETECTION

- [284] Solutions for antibody detection are prepared using Vector[®] Biotinylated antibody (BA series), Vectastain[®] ABC-AP Kit (AK-5000), 10 mM sodium phosphate, pH 7.5, 0.9% saline (PBS), Vector[®] Red Alkaline Phosphatase Substrate Kit I (SK-5100), and 100 mM Tris-HCl, pH 8.2 Buffer. To prepare biotinylated antibody, add 10 ml of PBS to reagent tube, add 1 drop biotinylated antibody to the PBS, then mix gently. To prepare ABC, to 10 ml of PBS, add 2 drops each of Reagent A and Reagent B, mix immediately, then allow to stand 30 minutes before use. To prepare AP Red, which should be prepared immediately

before use, to 5 ml of Tris-HCl buffer, add 2 drops of Reagent 1 and mix well, add 2 drops of Reagent 2 and mix well, then add 2 drops of Reagent 3 and mix well.

EXAMPLE 8: DEPARAFFINIZATION AND REHYDRATION OF SAMPLES

[285] The purpose of this protocol is to remove paraffin from and rehydrate preserved tissues in preparation for IHC procedures. Materials and equipment include fume hood, vertical slide rack(s), three xylene (VWR #72060-088) baths, three 100% alcohol blend (VWR #72060-050) baths, two 95% alcohol blend (VWR #72060-052) baths, one 70% alcohol blend (VWR #72060-056) bath, and Tris-Buffered Saline (DAKO® S1968) + Tween® (DAKO S1966).

[286] Insert the slides into the vertical rack(s). Move slides through baths inside fume hood as follows:

Xylene 5 Minutes
Xylene 5 Minutes
Xylene 5 Minutes
100% Alcohol 2 Minutes
100% Alcohol 2 Minutes
100% Alcohol 1 Minute
95% Alcohol 2 Minutes
95% Alcohol 2 Minutes
70% Alcohol 1 Minute

[287] Finally, place slides into a container with TBST.

EXAMPLE 9: STEAM METHOD OF TARGET RETRIEVAL

[288] The purpose of this protocol is to optimize antibody binding within paraffin embedded tissues. Materials and equipment included a steamer, deionized H₂O, target retrieval solution, 10X concentrate (DAKO #S1699), 250 ml graduated cylinder, 15 ml graduated cylinder, staining dish(es), and deparaffinized and rehydrated tissue on microscope slides in immersed TBST. The procedure is to a) fill the steamer with deionized H₂O to appropriate depth as indicated, b) turn the steamer on, c) in a graduated cylinder, measure 135ml of deionized H₂O and pour into staining dish(es), d) pipette 15ml of target retrieval solution and release into deionized H₂O, e) place the staining dish(es) into the basket of the steamer and heat for at least 10 minutes to preheat, f) add rack(s) containing tissue slides to heated target retrieval solution, g) cover and steam for 20 minutes, h) remove container from

steamer and let stand at room temperature for 20 minutes, i) transfer rack(s) with slides to container(s) of TBST, and j) slides are now ready for staining procedures.

EXAMPLE 10: ANTIBODY DETECTION

- 5 [289] The deparaffinized, rehydrated, and steamed (if needed) slides are loaded onto racks within a DAKO autostainer and then the autostainer is run according to the manufacturer's instructions. The slides are removed and the autostainer is turned off.

EXAMPLE 11: WESTERN BLOTTING

- 10 [290] The purpose of this protocol is to visualize the immunoreactivity of the antibodies described above against the particular GPCR on a western blot. Materials and equipment included western blot membrane, TBS Tween (TBST: 100 mM Tris-HCl pH 7.5, 150 mM NaCl, 0.1% TweenTM 20), 5% non-fat dried milk in TBST (blotto), antibody of interest (primary), peroxidase-conjugated AffiniPure goat anti-rabbit IgG (H+L) (secondary) –
15 Jackson ImmunoResearch, ECL solution (Amersham Biosciences, Uppsala Sweden), film, developer D-19, fixer, rocking platform.

- [291] During the blotting procedure, the blot is kept wet at all times and on a substantially level surface. The Western blot is placed right-side up in 10 ml of blotto. The membrane is flipped over and the dish rocked so that the solution covered it. The membrane is then
20 flipped back to the right side and solution is again rocked over it. The blot is then placed on a shaker for at least 1 hour. Ten ml of primary antibody are prepared by diluting 1:500 in blotto.

- [292] The blotto is removed from the Western blot and replaced with the primary antibody. The blot is flipped again and placed on the shaker for 1 hour. Secondary antibody
25 and peroxidase-conjugated AffiniPure goat anti-rabbit IgG (H+L) are prepared 1:20,000 in 10 ml of blotto. The primary antibody is removed and the Western blot is washed 3 times with 10 ml of blotto. The blotto is removed and replaced with the secondary antibody solution. The blot is flipped and placed on the shaker for 1 hour. The secondary antibody is removed and the blot washed 2 times with 10 ml of blotto. The blotto is removed and the blot is
30 washed 2 times with 10 ml TBST. ECL is prepared by combining equal amounts of Solution 1 and 2.

[293] The blotto is removed and 1 ml of ECL is placed on the blot. The blot is flipped and let sit for 1 minute. The blot is placed on plastic wrap and immediately covered with plastic wrap. The ECL is pressed out. The blot is placed on the film, then the film is developed.

5

[294] From the foregoing, it will be appreciated that, although specific embodiments of the invention have been described herein for purposes of illustration, various modifications may be made without deviating from the spirit and scope of the invention. Accordingly, the invention includes all permutations and combinations of the subject matter set forth herein

10 and is not limited except as by the appended claims.

WHAT IS CLAIMED IS:

1. An isolated antigenic peptide according to any one of SEQ ID NOS. 692-2292.
- 5 2. An isolated antigenic peptide comprising an amino acid sequence that is at least about 90% identical to a sequence set forth in any one of SEQ ID NOS. 692-2292.
3. An isolated antigenic peptide that is an analog of an antigenic peptide according to any one of SEQ ID NOS. 692-2292.
4. An isolated antigenic peptide comprising a short antigenic amino acid
10 sequence that is identical to at least 5 consecutive amino acids set forth in any one of SEQ ID NOS. 692-2292.
5. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to or contains no more than one conservative amino acid substitution over at least 7 consecutive amino acids set forth in any one of SEQ ID NOS. 692-
15 2292.
6. A kit for the detection of antibodies against a particular GPCR in a sample comprising:
 - a) an isolated antigenic peptide according to any one of claims 1-5 and derived from the particular GPCR, and
 - 20 b) at least one of a reagent or a device for detecting the antibodies.
7. An isolated antibody having high specificity and high affinity or avidity for a particular GPCR comprising a peptide sequence that is identical to any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151,
25 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is identical to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187,
30 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.
8. An isolated antibody having high specificity and high affinity or avidity for a particular GPCR comprising a peptide sequence that is at least about 90% identical to any

one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using the peptide sequence that is
5 at least about 90% identical to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

9. An isolated antibody having high specificity and high affinity or avidity for a
10 particular GPCR comprising a peptide sequence that is an analog to any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced using an isolated antigenic peptide comprising the
15 peptide sequence that is the analog to the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

10. An isolated antibody having high specificity and high affinity or avidity for a
20 particular GPCR comprising a peptide sequence that is identical to at least 5 consecutive amino acids set forth any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372, wherein the antibody was produced
25 using a short isolated antigenic peptide comprising the at least 5 consecutive amino acids set forth in the any one of SEQ ID NOS. 692-703, 713-730, 744-802, 807-820, 825-875, 880-889, 917-941, 950-964, 971-984, 989-993, 1010-1013, 1021-1024, 1029-1043, 1049-1052, 1057-1072, 1087-1113, 1124-1151, 1161-1172, 1179-1187, 1198-1209, 1228-1231, 1245-1257, 1271-1279, 1304-1308, 1369-1372.

30 11. An isolated antibody specific for a particular GPCR comprising a peptide sequence that is identical to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028,

1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955,
5 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is identical to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270,
10 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

12. An isolated antibody specific for a particular GPCR comprising a peptide
15 sequence that is at least about 90% identical to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679,
20 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using the peptide sequence that is at least about 90% identical to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086,
25 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

30 13. An isolated antibody specific for a particular GPCR comprising a peptide sequence that is an analog to any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028,

1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955,
 5 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using an isolated antigenic peptide comprising the peptide sequence that is the analog to the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270,
 10 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

14. An isolated antibody specific for a particular GPCR comprising a peptide
 15 sequence that is identical to at least 5 consecutive amino acids set forth any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009, 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563,
 20 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292, wherein the antibody was produced using a short isolated antigenic peptide comprising the at least 5 consecutive amino acids set forth in the any one of SEQ ID NOS. 704-712, 731-743, 774-777, 803-806, 821-824, 876-879, 890-916, 942-949, 965-970, 985-988, 994-1009,
 25 1014-1020, 1025-1028, 1044-1048, 1053-1056, 1073-1086, 1114-1123, 1152-1160, 1173-1178, 1188-1197, 1210-1227, 1232-1244, 1258-1270, 1280-1303, 1309-1368, 1373-1377, 1386-1389, 1394-1402, 1462-1482, 1496-1525, 1542-1549, 1557-1563, 1583-1649, 1656-1679, 1684-1688, 1693-1732, 1744-1752, 1765-1839, 1846-1854, 1855-1866, 1871-1917, 1926-1941, 1952-1955, 1960-1980, 1985-2141, 2152-2165, and 2170-2292.

30 15. A kit for the detection of antibodies against the particular GPCR of claim 5 comprising:

a) an isolated antibody according to any one of claims 7-14, and

b) at least one of a reagent or a device for detecting the antibody.

16. An assay for the detection of a particular GPCR in a sample, comprising:

a) providing an isolated antigenic peptide according to any one of claims 1-5,

b) contacting the isolated antigenic peptide with the sample under conditions suitable
5 and for a time sufficient for the antigenic peptide to bind to one or more antibodies specific
for the particular GPCR present in the sample, to provide an antibody-bound antigenic
peptide, and

c) detecting the antibody-bound antigenic peptide, and therefrom determining whether
the sample contains the particular GPCR.

10 17. The assay of claim 16 further comprising the step of binding the isolated
antigenic peptide or the antibody to a solid substrate.

18. The assay of claim 16 or 17 wherein the sample is an unpurified sample.

19. The assay of any one of claims 15-18 further comprising, prior to the
contacting, obtaining the sample from a human being.

15 20. The assay of any one of claims 15-19 wherein the assay is selected from the
group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a
radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay
(ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an
immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an
20 immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a
biosensor assay, and a low-light detection assay.

21. An isolated nucleic acid molecule encoding an antigenic peptide according to
any one of SEQ ID NOS. 692-2292.

22. The isolated nucleic acid molecule according to claim 21 wherein the
25 molecule encodes a naturally occurring human antigenic peptide.

23. An isolated nucleic acid molecule encoding an antigenic peptide that is at least
about 90% identical to any one of the antigenic peptides set forth in SEQ ID NOS. 692-2292.

24. The isolated nucleic acid molecule according to claim 23 wherein the
antigenic peptide is at least about 95% identical to the antigenic peptide.

30 25. The isolated nucleic acid molecule according to claim 23 or 24 wherein the
molecule encodes a naturally occurring human antigenic peptide.

26. A process for producing an isolated polynucleotide comprising hybridizing a nucleotide encoding an antigenic peptide according to any one of SEQ ID NOS. 692-2292 to genomic DNA under highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

5 27. A method of identifying an amino acid sequence for an antigenic peptide from a candidate polypeptide sequence wherein the antigenic peptide has a length of about 5 to about 100 amino acids, the method comprising:

a) searching the candidate polypeptide sequence using a comparison window of the length, and

10 b) selecting against amino acid sequences of the length and having at least 3 characteristics selected from the group consisting of 1) at least two consecutive prolines, 2) at least two consecutive serines, 3) at least two consecutive lysines, 4) at least two consecutive arginines, 5) at least two consecutive aspartic acids, 6) at least two consecutive glutamic acids, 7) methionine, 8) tryptophan, and 9) at least five consecutive amino acids comprising
15 no charged amino acids.

28. The method of claim 27 wherein the method further comprises selecting against at least 5 of the characteristics.

29. The method of claim 27 wherein the method further comprises selecting against at least 7 of the characteristics.

20 30. The method of claim 27 wherein the method further comprises selecting against the 9 characteristics.

31. The method of any one of claims 27-30 wherein the method further comprises:

c) selecting against amino acid sequences of the length and having at least one of the following additional characteristics 1) sequences having at least 5 consecutive amino
25 acids that are identical to an alternative amino acid sequence from an alternative polypeptide that is different from the candidate polypeptide, 2) posttranslational modification sites, and 3) highly hydrophobic sequences.

32. The method of claim 31 wherein the posttranslational modification sites are phosphorylation or glycosylation sites.

30 33. The method of claim 31 or 32 wherein the method further comprises selecting against at least 2 of the additional characteristics.

34. The method of claim 31 or 32 wherein the method further comprises selecting against the 3 additional characteristics.

35. The method of any one of claims 27-34 wherein the method further comprises performing a BLAST-type or a FAST-type analyses for the candidate polypeptide sequence.

5 36. The method of any one of claims 27-34 wherein the method further comprises performing a BLAST analysis for the candidate polypeptide sequence.

37. The method of any one of claims 27-36 wherein the antigenic peptide has a length from 6 amino acids to about 50 amino acids.

10 38. The method of any one of claims 27-36 wherein the antigenic peptide has a length from 6 amino acids to about 20 amino acids.

39. The method of any one of claims 27-36 wherein the antigenic peptide has a length of about 20 amino acids.

40. The method of any one of claims 27-39 wherein the polypeptide is a protein.

15 41. The method of any one of claims 27-40 wherein the polypeptide is a human protein.

42. The method of any one of claims 27-41 wherein the polypeptide is a naturally occurring protein.

43. An isolated antigenic peptide that is specific for the candidate polypeptide of any one of claims 27-42 that is produced according to the method of any one of claims 27-42.

20 44. An antigenic peptide that is at least about 90% identical to the isolated antigenic peptide of claim 43.

45. An isolated antigenic peptide that is an analog of the isolated antigenic peptide of claim 43.

25 46. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to at least 5 consecutive amino acids of the isolated antigenic peptide of claim 43.

30 47. An isolated antigenic peptide comprising a short antigenic amino acid sequence that is identical to or contains no more than one conservative amino acid substitution over at least 7 consecutive amino acids of the isolated antigenic peptide of claim 43.

48. A kit for the detection of antibodies against the candidate polypeptide of any one of claims 43-47 in a sample comprising:

a) an isolated antigenic peptide according to any one of claims 43-47 and derived from the candidate polypeptide, and

b) at least one of a reagent or a device for detecting the antibodies.

49. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 43, wherein the antibody was produced using the isolated antigenic peptide of claim 43.

50. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 44, wherein the antibody was produced using the isolated antigenic peptide of claim 44.

51. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 45, wherein the antibody was produced using the isolated antigenic peptide of claim 45.

52. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 46, wherein the antibody was produced using the isolated antigenic peptide of claim 46.

53. An isolated antibody specific for a candidate polypeptide comprising an amino acid sequence that is identical to the amino acid sequence of the isolated antigenic peptide of claim 47, wherein the antibody was produced using the isolated antigenic peptide of claim 47.

54. The isolated antibody of any one of claims 49-53 wherein the antibody has high specificity and high affinity for the candidate polypeptide.

55. A kit for the detection of antibodies against the candidate polypeptide of any one of claims 43-47 comprising:

a) an isolated antibody according to any one of claims 49-53, and

b) at least one of a reagent or a device for detecting the antibody.

56. An assay for the detection of a candidate polypeptide in a sample, comprising:

a) providing an isolated antigenic peptide according to any one of claims 43-47,

b) contacting the isolated antigenic peptide with the sample under conditions suitable and for a time sufficient for the antigenic peptide to bind to one or more antibodies specific for the candidate polypeptide present in the sample, to provide an antibody-bound antigenic peptide, and

c) detecting the antibody-bound antigenic peptide, and therefrom determining whether the sample contains the candidate polypeptide.

57. The assay of claim 56 further comprising the step of binding the isolated antigenic peptide or the antibody to a solid substrate.

58. The assay of claim 56 or 57 wherein the sample is an unpurified sample.

59. The assay of any one of claims 56-58 further comprising, prior to the
5 contacting, obtaining the sample from a human being.

60. The assay of any one of claims 56-59 wherein the assay is selected from the group consisting of a countercurrent immuno-electrophoresis (CIEP) assay, a radioimmunoassay, a radioimmunoprecipitation, an enzyme-linked immuno-sorbent assay (ELISA), a dot blot assay, an inhibition or competition assay, a sandwich assay, an
10 immunostick (dip-stick) assays, a simultaneous assay, an immunochromatographic assay, an immunofiltration assay, a latex bead agglutination assay, an immunofluorescent assay, a biosensor assay, and a low-light detection assay.

61. An isolated nucleic acid molecule encoding an antigenic peptide according to any one of claims 43-47.

15 62. The isolated nucleic acid molecule according to claim 61 wherein the molecule encodes a naturally occurring human antigenic peptide.

63. An isolated nucleic acid molecule encoding an antigenic peptide that is at least about 90% identical to any one of the antigenic peptides set forth in claims 43-47.

64. The isolated nucleic acid molecule according to claim 63 wherein the
20 antigenic peptide is at least about 95% identical to the antigenic peptide.

65. The isolated nucleic acid molecule according to claim 63 or 64 wherein the molecule encodes a naturally occurring human antigenic peptide.

66. A process for producing an isolated polynucleotide comprising hybridizing a nucleotide encoding an antigenic peptide according to any one of claims 43-47 to genomic
25 DNA under highly stringent conditions and isolating the polynucleotide detected with the nucleotide.

SEQ ID NO:	LSID	Gene	Source ID	Sequence	Code	SpeciesName
526	160397	Latrophilin-2	NP_036434.1	MVSSGCRMRS LWFIIVISFL PNTEGFSRAA LPFGLVRREL SCEGYSIDLRCPGSDVIMIE SANYGRTDDK ICDADPFQME NTDCYLPDAF KIMTQRCNNR TQCIVVTGSD VFPDPCGTY KYLEVQYECV PYIFVCPGTL KAIVDSPCIY EAEQKAGAWC KDPLQAADKI YFMPWTPYRT DTLIEYASLE DFQNSRQITTT YKLPNRVDGT GFVYDGAUF FNKERTRNIV KFDLRTRIKS GEAINYANY HDTSPYRWGG KTDIDLAVDE NGLWVIYATE QNNGMIVISQ LNPYTLRFEA TWETVYDKRA ASNAFMICGV LYVRSVYQD NESETGKNSI DYINTRLNR GEYVDVFPFN QYQYIAADV NPRDNQLYVW NNNFILRYSL EFGPPDPAQV PTTAVTITSS AELFKTIIST TSITSQKQPM STTVAGSQEG SKGTPKPPAV STTKIPPITN IFPLPERFCE ALDSKGIKWP QTQRGMMVER PCPKGTRGTA SYLCMISTGT WNPKGPDLSN CTSHWVNQLA QKIRSGENAA SLANELAKHT KGPVFAGDVS SSVRLMEQLV DILDAQLQEL KPSEKDSAGR SYNKAIVDTV DNLLRPEALE SWKHMNSSEQ AHTATMLLDT LEEGAFVLAD NLEPTRVSM PTENIVLEVA VLSTEGQIQD FKFLPGKGA GSSIQLSANT VKQNSRNGLA KLVFIYRSL GQFLSTENAT IKLGADFIGR NSTIAVNSHV ISVSINKESS RVYLTDPVLF TLPHIDPDNY FNANCSFWNY SERMTMGYWS TQGCKLVDIN KTRITTCACSH LTNFAILMAH REIAYKDGVBH ELLLTVITW GIVISLVCLA ICIFTFCFR GLQSDRNTIH KNLCINLFIA EFIFLIGIDK TKYAIACPIF AGLLHFFFLA AFAWMCLEGV QL'YLM'VEVF ESEYSRKKY YVAGYLPAT VVGVSAAIDY KSYGTEKACW LHVDNYFIWS FIGPVTFIIL LNIUFLVITL CKMVKHSNTL KPDSSRLNI KSWVLGAFAL LCLLGLTWSF GLLFINEETI VMAYLFTIFN AFQGVFIF HCALQKKVRK EYGKCFRHSY CCGGLPTESP HSSVKASTTR TSARYSSGTQ SRIRRMWNDT VRKQSESSFI SGINSTSTL NQGHSLNNAR DTSAMDTLPL NGNFNNSYSL HKGDYNDVSQ VVDCGLSLND TAFEKMISE LVHNNLRGSS KTHNLELTL VPQVIGSSS EDDAIVADAS SLMHSDNPGLELHHKELEAP LIPQRTTHSL YQPQKKVKSE GTDSYVSQLT AEAEHLQSP NRDSLYTSMP NLRDSPYPES SPDMEEDLSP SRSENEIDIY YKSMPNLGAG HQLMCYQIS RGNSDGYIIP INKEGCIPEG DVREGQMQLV TSL ccgcggctgg gagacagcga gccagagctc ggggtttgt gcagagcca cggcgggggc tggggcgagt ggccggcaltg gctgaaggct gcgctcigca accttgaaga gccgctgcac tgaagaggcca gggaacaggaga gacgggtgcg atggcagagc gcggcccccgc cgcctgcgcc ggcccgcccc ggctggcctg agccgcgcga ggagcggggc tgcctcigcg cgtccatgga gcagcgggaa gggcgaact ccggagcgcc gcgtccctgc gccctcgggg gcggcggggg acatcgagg gcagcgagc accgcgagg aagagacccc cgcctcagcc ccgagcgccg agcagcgccg agcaalgcgc ggcccgctag gcctcctgc ctctcgcgc gacagcgcc ccggcgagg ccggcgggc aggcggcgcc cgcctcctgc ccggcgccgc tgcagctgcg accggcgaccg ctggggctgc tggctcggc cggggccagc ggccggggc cgcctcctgc ccggcgccgc tgcagctgcg accggcgaccg tgggtggac tgcctcggga aggggctgac ggccgtgccc gaggggctca gcgcttcac ccaagcgctg galatcagta tgaacaacal tactcagttg ccagagatg cattaaaga ctttccttt clagaagagc lacaaatggc gggaacgac cttcttlla taccaccaaa ggctctgtct gggtgaaag aactcaaatg tctaacgtc cagaataatc agtgaaaaac agtaccaggt gaagccaltc gagggctgag tgccttgag tctttgcgt tagatgcaa ccatlatacc tcatgcccg aggacagtt tgaaggactt	P	Homo sapiens
527	160411	G Protein-Coupled Receptor GPR48	NM_018490		A	Homo sapiens

[illegible]

528	160411	G Protein- Coupled Receptor GPR48	NP_060960.1	<p>atgtaataa taaaaataga agaagaaga alaaagctta gtctgtgtc ttataaatt aaaaatttta ctgatttcc atctatggc ttaaaccta ttactgggtg gtagcttaaa gttataattg ttcaatagt ttttgaca gtgtgtaaa tcaatagcaa accactgoc ataatgta ttctgaat actaaaaaa tccagctaga ttgagttta ataataaac tgcacalact gtgcalataa lgaatttta tcttatgaa altatttta gaacacaagt tgggaaagt eggttcigt catttggtt aatnaagct acctctaaa ctatagtggc tgccagtagc agactgtaa atttggttt atatacttt tgcattgaa atagtcttg ttgacattg tcaagttaat aaaaacagaa tcttgata tcaaaatcat gtagtttgta taaaatggg gaaggaftta ttacagigt gttgaatt ttgaaggcca actiattaca agtttaaaa atgtcata tgaatatta cacatcigt aatalataa tcaataactg gtaagaact ccaataaaa aggttttc caaaattcag gtaatgaaa attttcatt ttattcatt aaaaactaga alaaacagaa taaaaagtg ttaacttg tgcataatg tatgaatac aatattgac tcaigtgtt gaattataa agttctaga aagcaaaaa a</p>	P	Homo sapiens
				<p>MPGPLGLLCF LALGLLSAG PSGAAPLCA APCSCDGRDR VDCSGKGLTA VPEGLSAFTQ ALDISMNNIT QLPEDAFKNF PFLEELQLAG NDLSFIHPKA LSGLKELKVL TLQNNQLKTV PSEAIRGLSA LQSLRLDANH ITSPDFAFTNL GLVQLRHLWL DDNSLTEVPV HPLSNLPTLQ ALTLALNKIS SIPDFAFTNL SSLVVLHLHN NKIRLSQHC FDGLDNLETL DLSYNNLGEF PQAIAKARPSL KELGFHSNSI SVIPDGAFTG NPLLRTHLY DNPLSFVGN ASHNLSDLHS LVIRGASMVQ QFPNLGTGVH LESLTLTGK ISSIPNNLCQ EQKMLRTLDL SYNNIRDLPF FNGCHALEEI SLQRNQIYQI KEGTFQGLIS LRILDLSRNL IEHISRAFA TLGPITNLDV SFNELTSFT EGPNGLNQLK LVGNFKLKEA LAAKDFVNLR SLSVPYAYQC CAFWGCDSA NLNTEDNSLQ DHSVAQEKGT ADAANVTSTL ENEHSQIII HCTPSTGAFK PCEYLLGWSM IRLTVWFIL VALFFNLLV LTTFASCTSL PSSKLFGLI SVSNLFMGTY TGILTFLDV SWGRFAEFGI WWETGSGCKV AGFLAVFSE SAIFLLMLAT VERSLSAKDI MKNGKSNHLK QFRVAALSAF LGATVAGCFP LFHREYSAS PLCLPFTGE TPSLGFTVTL VLLNSLAFLL MAVIYTKLYC NLEKEDSEN SQSSMIKHVA WLIFTNClFF CPVAFSSFAP LITAISPE IMKSVTLIFF PLPACLNVL YVFFNPKFKE DWKLLKRRVT KKSQSVSVSI SSQGGCLEQD FYDYDCGMYSH LQGNLTVDCD CESFLLTKPV SCKHLIKSHS CPALAVASCO RPEGYWSDCG TQSAHSDYAD EEDSFVSDSS DQVQACGRAC FYQSRGFPLV RYAYNLPRVK D</p>	A	Homo sapiens
529	160435	LS160435 Receptor	AX147830	<p>aactggaagg gcagccgtct gccgccacg aacacttct caagcactt gagtgaccac ggcttgcaag ctgggtgctg gcccccgag tccgggctc tggagcagcg ccgtcgactt aagcgttgca tctgttacc tggagacccct ctgagctc acctgtact tctccgtc ctcttgaca gagcccgccg gaggaacctt ccaagatga ggctccggaac agcacccg cggacaacgc gagctgtagc atgcctgcga accggcgat ccgctgggoc ctgcocgtgg tgaactcgt gggtggcg gtcagcalcc cgggcaacct ctctctctg tgggtgctgt gccggcgcat gggggccaga tccocgtcgg tcatcttca gatcaacctg agcgtcacg acctgactt ggccagcgtg ttgccttcc aaatctacia ccattgcaac cggcaccact gggtaltcgg ggtgctgctt tgaacgtgg tgaacgtggc ctcttaccga aacatgatt ccagcalctt caccatgacc tgtatcagcg tggagcgtt octtgggggtc ctgaccgc tgaactocaa ggcgtggcgc cgcctgctt acgctggg cgcgtgtgca gggacctggc tgcctgctt gaccgccc tccocgtcgg ccgacaccca tctaacctac ccggtgacg cctgggcat calcaactgc ttgacgtcc tcaagtgagc gatctccc agcgtggcca tggggccgt gtctcttc accatctca tctgtgtt octatccc ttctgacta ccgtggcttg ttacaggg accatctca agctgtgog cacggagagag gcgcacggoc ggagacagcg gagggcgcg tgggocctgg ccgctgggt ctgtcggcc ttgtacct</p>		

530	160435	LS160435 Receptor	LR80	<p>gcctcgcccc caacaattc gctgctctgg cgcacalcgt gtagccgcctgg ttctacggca agagctacta ccacgtgtac aagctcacgc tctgtctcag ctgctcaac aactgtctgg accgttgtt ttattactt ggtgtccggg aattocagct ggccttgcgg gaatatltgg gctgcccggc ggtgtccaga gacaccttgg acacgcgcgc ctagagcttc ttctccgcca ggaaccacgc cgtgcctcc gaggccggcg cgcaccciga aggtatggag gtagccacca gggccggcct ccagagggcag gtaggtgtgt tctagctccc gggggcgccag ctggagagc cggggcgcca gcttggagga tccagggcg ctagggaggg ccacggggcc agaggttcag gtagaacagc tgcgtgtc ccaggccag cagagggccc gtagggaggg gctccaggc ttattctc ccaggccagc cagaggcaac ggttaggag ggttccagg ctccacag gtagagaaa cagcaaac ccaggcagc acagggtgt tttatctc cagagggtc ctgtctct cgtgtcagg gtagagctt gtagccag ccgggtaatt ttgttatt tttttagtag agctggcg tccccgga gctctttag cactctcac accgttcat accggaggat gtagattcaa ccaggccac cgcctacccg actgggtt tggatctt cgtggcgga actggcgcc cactccag ctctctcc tgcgtacalc gtccttagc acactgtcc ataccggag algatatt aaccagcccc accgctacc ctagcgggt tctggatc ctgtgtggc gaactggag cccattccc agctcttc ctgtctga tgccttga gttgtgtt tggctctc cattctctc cagggttct ggtctcga gcccgggca cgcgaatt tctgttatt tactcagg gtaggtgt tctgtgtt ggaattctc tttagaga ggcctgggg cctcggcag ttagctact tccgtgcca ctccctca cacacacc ccccgtgc ggaattc</p>	P	Homo sapiens
531	160889	Platelet Activating Receptor Homolog (H963)	NM_013308	<p>MQVNSTGPD NATLQMLRNP AIAVALPVVY SLVAAVSIPG NLFSLWVLCR RMGPRSPSVI FMINLSVTDL MLASVLPFQI YYHCNRHHWV FGVLLCNVVT VAFYANMYSS ILTMTCSIVE RFLGVLYPLS SKRWRRRRYA VAACAGTWLL LLTALSPLAR TDLTYPVHAL GHTCFDVLK WTMPLPSAMW AVFLFTIFL LFLIPFVITY ACYTATILKL LRTEEAHGRE QRRRAVGLAA VLLAFVTCF APNNFVLLAH IVSRLFYGKS YHVYKLTLC LSLNNCLDP FVYFASREF QLRLREYLGC RRVPRDILT RRESLSART TSVRSEAGAH PEGMEGATRP GLQRQESVF gaattcggcc aaagaggct algctict gaagactgc agcaaggct gctgagctc acagaagata gcccaggt ttggagtg tttagatg gattctaga tgaactgac tgaactgaa tcttgctt atattacc agctacaa ccttgagtc ttagaaatt ttcttca aaagcagc atcttact tccctaga tgaacaacag tctgtctc tgcaggtt ataaagat ggagccalc agctatttt ttattagt ttctgtt ggaattatg gtaggttt tgaacttgc gctttalac agaaatac gaalcacagg tctgtgaga tctactaa taattgtt acagcgtt tctgttgc tctggcalt ctagtgaata ttgtgtga cttgggtgt gaccttga agctgaag atctcagc caagtaacag cctgtcat ctatcata atgtattt caattct cttagcatt gtagcatt accgtgtc ttagctaga ctagctaga agatcagc atatacag aatacaga cccggtt ccaaaatgat atcaaccgt gtaggctaa tggctcttct talaaaggc ccaatalga tttccat caaagacalc aaggaaaagt caaatgtgg ttgtatggag tttaaaaagg aattggag aattggat tctgtaca attcatag ttagcaata ttttaatt tctagcalt calttaala tccaattgc ttgaatgc acagctac agaaacaag aatgaata ttaccaat gtagaaaagg ctctcatca calacttia gtagccagg gtagcalt algctgtt cttacaca ttgcctgg ccgtatacc ctacccaga cagaagcalt aactgattg tcaaccagg ttacatt caaaggcaa gaggctac tgcctggc tgtgtgaac ctgtgtt atctatct glactatcac ctctaaaag cttccgctc aaaggctc gtagcttgg cttacataa agagaccaag gctcagaag aaaaattag atgtgaaa aatgcalaaa agacaggat ttgtgtc ccaatttgg cttactgga ccalaaagt aattatgct ttgaagata aaaaaaaa aaagggcc gc</p>	A	Homo sapiens
532	160889	Platelet Activating Receptor	NP_037440.1	<p>MTNSSFFCPV YKDLPEFTYF FYLVFLVGII GSCFATWAFI QKNTNHRCSV IYLNLLTAD FLTLALPVK IVVDLGVAPW KLKIFHCQVT ACLYINMYL SIIFLAFVSI DRCLQLTHSC KIYRIQEPGF AKMISTVVWL MVLLMVPNM MPIKDIKEK</p>	P	Homo sapiens

535	161214	Galanin Receptor GalR3	NM_003614	<p>GKRRSSLDGS ESAKTSLQVT NLVSAIVFLY DSLTGVPILV VSFFSLKSDS APPWMVLAVL WCSMAQITLL PSFIWSCERY RADVRTVWEQ CVAIMSEEDG DDGGGDDYYA EGRVCKVRFD ANGATGQSR DPAQVKLLPG RHMLFPPLER VHYLQVPLSR RLSHDETINF STPREPGSFL HKWSSDDIR VLPASRALG GPPEYLGQRH RLEDEEDEEE AEGGGLASLR QFLESGVLGS GGGPPRGPGF FREEITTFID ETPLSPPTAS PGHSPPRRP LGLSPRRLSL GSPESRAVGL PLGLSAGRRC SLTGGEESAR AWGSGWGPNG PIFQLTIL</p> <p>tccagggtgc cgcgtgatg gggagatggc tgaigccag aacattcac tggacagccc agggaggtg gggccgtgg cagtgccgt ggccttgcc ctaattccc tgcgtggcac agtgggcaat gggctgggtgc tggcagtgct cctgcagcct ggccggagtg cctggcaggga gccggcagc accacggacc tgitatcct caacctggcg gtagctgacc tctgtcat cctgtgtgc gtagcccttc agggccacct ciacagctg gtagctggc tcttggggc cctgtgtgc aaggccgtgc acctgtcat ctactcacc atgiacgcca gcagctttac gctggctgt gctccgtgg acaggtacct gggcgtgcgg caaccgtgc gctggcgcc cctggcgacc cggcgtaacg ccggcgccgc agtggggctg gtagctgtgc tggcgcgct cttctggcg cctactca gctciacgg caccgtgcgc taccgtgcgc tggagctgc cgtgcccgc tggagggacg cggcgccgc cgcctggac gtagccacct tgcgtggcg ctactgtgc cctgtgtgc tggtagctg ggtctacggg cgcatgcgt gcttctgt gggcgccgtg ggtccgcgg ggcggcgggc ggcggagggc ggcggagggc gtagggggc cggcgggcg gccatgtgc cgtggcgcc gctciacgg cctgtgtgc gtcacacca cggcgtcalt cgtgtctt ggtacggcg cttgccttc agccggcca cctagcctg ccgctggcc tcatctgccc tggcctacgc caactcgtc ctcaaccgc tgcctacgc gctggctgc cgcacttcc ggcggcgctt ccgctggctg tggcggtgc ggcggcgacg cggcaccgt gcccgccgc cttgtgtgc cgtccgccc gctgtcgg gccacccgg cgtcccgga gacgcccgg ctagcgagg gctgtgct gtagcgcc agggccggga gccagggag ggaacgtcc acggcgagg ggtgcccga ggacggat aaacctgc gccgtgct cgtgtg</p> <p>MADAQNISLD SPGSVGAVV PVVFALIFLL GTVGNGLVLA VLLQGPSAW QEPGSTDLF ILNLA VADLC FILCCVPFQA TYTLDWLF GALVCKAVHL LYLTMYASS FTAAVSVDRL YLAVRHPLRS RALRTPRNAR AAVGLVWLLA ALFSAPYLSY YGTVRYGALE LCVPAWEDAR RRALDVATFA AGYLLPVAVV SLAYGRTLRF LWAAVGPAGA AAEEARRRAT GRAGRAMLAV AALYALCWGP HHALLCFWY GRFAFSPATY ACRLASHCLA YANSCLNPLV YALASRHFR RFRLLWPCGR RRRHRARRAL RVRPSSGP PGCPGDARPS GRLLAGGGQG PEPREGPVHG GEARGPE</p> <p>alggcgctga ccccgatgc cccgagcagc ttccctggc tggcgccac cggcagctct gtagcgaggc cgcctggcg cccaacga acctcaaa gctcctggc cagcccgacc gaggccagct cctggagga cctgtggcc acgggcaaca tgggactct gctgtggcc atggcggtg tggcggtgt gggcagcc taccgctgg tggcactg cgcctcctg cgtgggtg cctcaltg cgtctacgt gtaacctg cgtggcgga cctgtgtac cgtcagca tccctcat cgtggccacc taccacca agtagtgga ctccggggac gtagggctgc cgtgtctt cggcctggac ttctgacca tgcagcag catctacg ctagcgtga tgcagcga gcgtacgt gctgtgtgc ggcgtgtgga caccgtgcag cggcccaagg gctaccgcaa gctgtgtgc ctagggacct ggtgtgtgc cgtgtgtgc acgtgtccc tgaigtggc caltggcg gtagggggc gtcacaag cgtgtgtgc cccgctggc ggcggcggc caccgccc taccgtacg tgcctgc caccagatc gggggggc ggtgtgtc cgtgtgtc cgtgtgtc taccgccc tggcccgcc caccgccc tgcagcgcg cctctcaa gggggggc cggccggcg cgtgtgtc gtagcgatg tgcgtctt</p>	A	Homo sapiens
536	161214	Galanin Receptor GalR3	NP_003605.1	<p>alggcgctga ccccgatgc cccgagcagc ttccctggc tggcgccac cggcagctct gtagcgaggc cgcctggcg cccaacga acctcaaa gctcctggc cagcccgacc gaggccagct cctggagga cctgtggcc acgggcaaca tgggactct gctgtggcc atggcggtg tggcggtgt gggcagcc taccgctgg tggcactg cgcctcctg cgtgggtg cctcaltg cgtctacgt gtaacctg cgtggcgga cctgtgtac cgtcagca tccctcat cgtggccacc taccacca agtagtgga ctccggggac gtagggctgc cgtgtctt cggcctggac ttctgacca tgcagcag catctacg ctagcgtga tgcagcga gcgtacgt gctgtgtgc ggcgtgtgga caccgtgcag cggcccaagg gctaccgcaa gctgtgtgc ctagggacct ggtgtgtgc cgtgtgtgc acgtgtccc tgaigtggc caltggcg gtagggggc gtcacaag cgtgtgtgc cccgctggc ggcggcggc caccgccc taccgtacg tgcctgc caccagatc gggggggc ggtgtgtc cgtgtgtc cgtgtgtc taccgccc tggcccgcc caccgccc tgcagcgcg cctctcaa gggggggc cggccggcg cgtgtgtc gtagcgatg tgcgtctt</p>	P	Homo sapiens
537	161221	Urolensin-II Receptor (GPR14)	NM_018949	<p>alggcgctga ccccgatgc cccgagcagc ttccctggc tggcgccac cggcagctct gtagcgaggc cgcctggcg cccaacga acctcaaa gctcctggc cagcccgacc gaggccagct cctggagga cctgtggcc acgggcaaca tgggactct gctgtggcc atggcggtg tggcggtgt gggcagcc taccgctgg tggcactg cgcctcctg cgtgggtg cctcaltg cgtctacgt gtaacctg cgtggcgga cctgtgtac cgtcagca tccctcat cgtggccacc taccacca agtagtgga ctccggggac gtagggctgc cgtgtctt cggcctggac ttctgacca tgcagcag catctacg ctagcgtga tgcagcga gcgtacgt gctgtgtgc ggcgtgtgga caccgtgcag cggcccaagg gctaccgcaa gctgtgtgc ctagggacct ggtgtgtgc cgtgtgtgc acgtgtccc tgaigtggc caltggcg gtagggggc gtcacaag cgtgtgtgc cccgctggc ggcggcggc caccgccc taccgtacg tgcctgc caccagatc gggggggc ggtgtgtc cgtgtgtc cgtgtgtc taccgccc tggcccgcc caccgccc tgcagcgcg cctctcaa gggggggc cggccggcg cgtgtgtc gtagcgatg tgcgtctt</p>	A	Homo sapiens

Homo
sapiens

P

cggggcctgc ttcctgocct tctggcctgc gcagctgctc gccagctacc accaggccccc gcctggccgccc cggacggcgc
 gcctgcaaa ctacctgacc acctgcctca cctacggcaa cagctgcgcc aaccccttcc tctacgct gctcaccagg
 aactaccgg accacctggc cggccgctgc cggggccccc gcagcggggg aggcgggggg cccgcttccct cctgcagcc
 ccgcggccgc ttccagcgt gttcggggcc ctcctgct tctgcagcc cacagccccc tgacagccctc gctcggccc
 cagcggcccc ggcccgacct gcggccgggg gtcccaggcc cccggcgga
 MALTPESPSS FPLAATGSS VPEPPGGPNA TLNSSWASPT EPSSLEDLVA
 TGTIGTLLSA MGVVGVVUNA YTLVVTCSR RAVASMYVYV VNLALADLLY
 LLSIPFIVAT YVTKWHFGD VGRVLFGLD FLTMHASIFT LTMSSERYA
 AVLRLDTVQ RPKGYRKLKLA LGTWLLALL TLPVMLAMRL VRRGPKSLCL
 PAWGPRAHRA YLTLFATSI AGPGLLIGLL YARLARAYRR SQRASFRRAR
 RPYGARALRLV LGIVLLFWAC FLFWLWQLL AQYHQAPLAP RTARIVNYLT
 TCLTYGNSCA NPFLYTLTTR NYRDHLGRV RGPGGGGRG PVPSLQPRAR
 FQRCSGRSL SCSFQPTDSL VLAPAAPARP APEGPRAPA

538 161221 Urotensin-II
 Receptor
 (GPR14) NP_061822.1

Homo
sapiens

A

alggcttgca atggcctgctc ggccagggggg cactitgacc ctgaggacti gaaccctgact gacgaggcac tgagadcaaa
 gtacctgggg cccagcaga cagagctgcti catgcccac tgccccat accctgctgat ctctgggggg ggccgctggg
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 gctcgggacc tgcctgggct gctggggggc ctggccctgg agctctatga gctggggcac aactacccct tctcctgggg
 cgttggggc tgcatttcc gcagctact gtttgaatg gctcctggc cctcagctc caacgtcact gcccctggc
 tggaaagcta tggggccgctc gggcaccac tccaggccag gctcagctgg acggggccc algcggccg agtgcctggg
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 ctgctcagc aggaaggccaa ggccaggggc tctgcagcag ccaggtccag atacactgc aggtctcagc agcagatcg
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 gcgtcagtg gaggctcgtg tccagctgga cagatggcct gcaactggcc ttccagcagc tgcactgcat ctccggcalt
 ttcttacc tgggctggc ggccaacccc gctcctata gccctatgc cagccgcttc cgaagagacct tccaggaggc
 cctgctcctc ggggccctgt gccatgcct cagacccccc caccgtccc acagctccag caggatgacc acaggcagca
 cctctgtga tgtgggctcc ctgggcagct gggtccaccc cctggctggg aacgatggcc cagaggcgca gcaagagacc
 gatccatcct ga

539 161249 G Protein-
 Coupled Receptor
 GPR66 NM_006056

Homo
sapiens

P

MACNGSAARG HFDPEDLNL DEALRLKYL G PQQTELFMPI CATYLLIFV
 GAVGNGLTCL VILRHKAMRT PTNYLYFLSLA VSDLLVLLVG LPLELYEMWH
 NYFLLGVGG CYRTHLLFEM VCLASVLNVT ALSVERYAV VHPLQARSMV
 TRAHVRRVLG AVWGLAMLC LPTNSLHGIR QLHVPCRPV PDSA VCMLVR
 PRALYNMVMVQ TTALLFFCLP MAIMSVLYLL IGLRLRRERL LLMQEA GRG
 SAAARSRYTC RLQQHDRGRR QVTKMLFVL V VVFGICWAPF HADRVMWSV
 SQWTDGLHLA FQHVHVISGI FFYLGSAANP VLYSLMSSRF REITQEALCL
 GACCHRLRPR HSSHLSRMT TGSTLCDVGS LGSWVHPLAG NDGPEAQET DPS
 atggctaac ttgacaata cactgaataa ttcaagatgg gtagcaacag taccagact gctgagattt actgtaagt
 cactaalg gaaatttcaat actccctcta tgaaccaacc tatatctca tatcttctc tggcttctc gctaacagtg cagccttg
 ggtctgctc cgcttcatca gcaagaaaaa taaagccatc attttcatga tcaactctc tgtggctgac ctgctcag tataltctt

540 161249 G Protein-
 Coupled Receptor
 GPR66 NP_006047.1

Homo
sapiens

A

atggctaac ttgacaata cactgaataa ttcaagatgg gtagcaacag taccagact gctgagattt actgtaagt
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541 161251 Purnergic
 Receptor P2Y10 NM_014499

542	161251	Purinegic Receptor P2Y10	NP_055314.1	<p>acccctccgg atttactat acalcagcca ccactggcct ttocagagag ccccttggct gctctgcttc taccgaagt altcaacat glalggcagc atltgttcc tgacgtgcat cagcttcaa aggtgtcttt ttctctcaa gcccttcagg gccagagact ggagcgttag glacgaltg ggcalcagtg ctgccalcg galcgtgtg ggagactgct gtttgcaatt tccalcctg agaagcacag actiaaaca caacaagcc tcttggctg alttgagata caagcaaatg aatgacgttg cgttggtcgg galallaca gttgctgagc ttgaggat ttgaltcca ggalcatca tgcaltggg tactggaaa actactat ccttgagaca gccaccaag gcttccaag ggacagtg gaggcagaaa gcactgcga tgggttcat ggtgtgca gcttctca tctgtcac tccatcat altaactta tttttacc calgglaag gaaacalca ttgacgttg tccgtgtg cgaatgcac tgaattcca cccctttg cgtgacctg caagctctg ctgcttgg gatccaatc ttattact tatggctca gagtgtcg accaactc cggcaatggc agtctgta ccgctccg cctcagagc aaggagagtg gtatcaat gattggclaa MANLDKYTET FKMGSNSTST AEIYCNVTNV KFQYSLYATT YILFIPGLL ANSAALWVLC RFISKKNKAI IFMINLSVAD LAHVLSPLR IYYYISHWP FQALCLLCF YLKYLNMYAS ICFLTCISLQ RCFFLLKPR ARDWKRRYDV GISAAIWVV GTACLPFIL RSTDNNNKS CFADLYKQM NAVALVGMIT VAELAGFVP VIIAWCTWK TTISLRQPPM AFQISERQK ALRMVFMCA VFFICTPYH INFIFTMVK ETIUSSCPV RIALYFHPFC LCLASLCCLL DPILYYFMAS EFRDQLSRHG SSVTRSLMS KEGSSMIG MATTSATSV NTSSLATTMT TNFTSLTST VTTIASLVPS TNSEDYYDD LDDVDYEEA PCYKSDTRL AAQVVPALYL LVFLGLLGN ILVVIIRY MKIKNLNML LLNLASDLL FLTLFPWMH YIGMYHDWTF GISLCKLLRG VCYMSLSQV FCILLTVDR YLA VVYAVTA LRFRVTTCGI VTCVCTWFLA GLLSLPEFFF HGHQDDNGRV QCDPYPEMS TNVWRRAHVA KVMLSLLP LLDMAVCYV IIRLLRRPS KKKYKAIRLI FVMVAYFVF WTPYNIVLLL STFHATLLNL QCALSSNLDL ALLITKTVA THCCINPVY AFVGEKFRRH LYHFFHTYVA IYLYKYPFL SGDGEKQEP TRI</p>	P	Homo sapiens
543	161293	G Protein- Coupled Receptor Ls161293 [Herpes virus]	NP_042597.1	<p>gcgagaacc cgaclgaocg cggccacggc ggctcccca cctgcgcgt cctgcggcg gcctggggc cggggcacic gggtcgoc cccaltggct cggccgcgg gaaactgagc gctggccgg gctgggggg gcggccggcg gccggcgiga ggaacctgac ctctcccg gcccgagccg cgtcccgct cccggcccg cctggagcg cctggcccg cccggcccg gcgacccgt tcttgcagcc gccctggcg gttggcgt cgtgcgtggc claggcgcc gttggggcg tggcggtgt cggcaacdc gttgtgtat ggalgtgt ggocacaag cgalgcgga cggcaccaa clctctc gtgaacctgg ccttcgcca cggcgccal gcgcgctca acgcgtggt caactcacc taccgctgc acggagagtg gtlctggc gccaactat gccgttoca gaactctc cccalcacc cgtgttcgc cagcalcac tccatgagg ccatcgcggt ggacagalac atggccatta ttgacccct gaagccocagg ctgtctgcca cggccacccg gatgctcat ggaagcalct ggatttggc atttactt gatlcttc agtgtctga ttccaaatc aaagtatgc caggccgtac tcttggctac gtcagggcg cagaaggtc aaggcaacat ttacgtacc acatgctgt calgtctgt gttgtactgt ttcttgt calcatggc altacacta ccatgttgg aalcagctc tggggaggg agatccagg agacactgc gacacgtacc agagagcagct gaaggccaag cggagggtg taaaaatga gatlctgt gttgtgacct ttgccatcg ctggctggcc taltacatct acttactc caccgccatc tatcagcagc tgaacaggtg gaaalacatc cagcaggtct acctggcag ctttggctg gccatgagct cgacalga caacccalc altactgt gcttgaataa gatttctgt cgtggctga agaggccct cgtctggct ccttcaloc acgttccag ctacgacgag ctggagctca aagccacag cttccacca altcgacaga gacgctata cacatgaca agaatgagat ccatgagcgt ggtattgac tccaacgalt ggagacagtc caggttccagt caccagaaga gagggagcac cagagacgta</p>	P	Equine herpesviri s 2
544	177147	Neuromedin K Receptor-Like (NK-4R)	NM_006679	<p>gcgagaacc cgaclgaocg cggccacggc ggctcccca cctgcgcgt cctgcggcg gcctggggc cggggcacic gggtcgoc cccaltggct cggccgcgg gaaactgagc gctggccgg gctgggggg gcggccggcg gccggcgiga ggaacctgac ctctcccg gcccgagccg cgtcccgct cccggcccg cctggagcg cctggcccg cccggcccg gcgacccgt tcttgcagcc gccctggcg gttggcgt cgtgcgtggc claggcgcc gttggggcg tggcggtgt cggcaacdc gttgtgtat ggalgtgt ggocacaag cgalgcgga cggcaccaa clctctc gtgaacctgg ccttcgcca cggcgccal gcgcgctca acgcgtggt caactcacc taccgctgc acggagagtg gtlctggc gccaactat gccgttoca gaactctc cccalcacc cgtgttcgc cagcalcac tccatgagg ccatcgcggt ggacagalac atggccatta ttgacccct gaagccocagg ctgtctgcca cggccacccg gatgctcat ggaagcalct ggatttggc atttactt gatlcttc agtgtctga ttccaaatc aaagtatgc caggccgtac tcttggctac gtcagggcg cagaaggtc aaggcaacat ttacgtacc acatgctgt calgtctgt gttgtactgt ttcttgt calcatggc altacacta ccatgttgg aalcagctc tggggaggg agatccagg agacactgc gacacgtacc agagagcagct gaaggccaag cggagggtg taaaaatga gatlctgt gttgtgacct ttgccatcg ctggctggcc taltacatct acttactc caccgccatc tatcagcagc tgaacaggtg gaaalacatc cagcaggtct acctggcag ctttggctg gccatgagct cgacalga caacccalc altactgt gcttgaataa gatttctgt cgtggctga agaggccct cgtctggct ccttcaloc acgttccag ctacgacgag ctggagctca aagccacag cttccacca altcgacaga gacgctata cacatgaca agaatgagat ccatgagcgt ggtattgac tccaacgalt ggagacagtc caggttccagt caccagaaga gagggagcac cagagacgta</p>	A	Homo sapiens

88gctccaatg tctgtccocg caggaaatcc aagttccact ccacacacgc cagcttgcg agctctcccc acatgtcgggt
 ggaagaaagg tcttgattt tctgtgggt caaggccact gcaaggccac cttctctgt cactgtctgt gctctcact ctcgtgaaagc
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 ccgaagaaala ttataaagt gtccagttt gcttaattaa aagttcactgt gacattgt gacatgata tggtagttt tccccaaa
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 ttatgtgt gattatgt aatgtatgt aatctgtgaa gtaggtgt aatgtgtgt gtaggtgt gtaggtgt aatgtgtgt
 caaggtgtgt aatgtatgt gtaggtgt aatgtatgt atgtgtgt atgtgtgt atgtgtgt atgtgtgt atgtgtgt

545	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	taaataatataaataatcatatgaataaat MASPAGNLSA WPGWGWPPPA ALRNLTSPPA PTASPPAPS WTPSPRPSPA HPFLQPPWAV ALWSLAYGAV VAVAVLGNLV VIWIVLAHKR MRTVTNSFLV NLAFADAAMA ALNALVNFY ALHGEWYFGA NYCRFQNFPP ITAVFASIYS MTAIAVDRYM AIDPLKRL SATATRIVIG SIWLAFLA FPQCLYSKKK VMPGRTLCTV QWPEGSRQHF TYHMIIVLV YCFPLLMGI TYTIVGHTLW GGEIPGDTCD KYQEQLKAKR KVVKMMIIV VFAICWLVPY HIYFILTAIY QQLNRWKYIQ QVYLASFULA MSSTMVNP II YCCLNKRFRG GFKRAFRWCP FIHVSSYDEL ELKATRLHPM RQSSLYTVTR MESMSVVFDSD NGD SARSSH QKRGTTTRDVG SNVCSRRNSK STSTTASFVS SSHMSVEEGS	P	Homo sapiens
546	177168	Cysteiny Leukotriene CYSLT1 Receptor	NM_006639	atggatgaaa caggaaatct gacagatct tctgcacat gccatgacac tatgatgac ttccgcaatc aagtgatc caccitgtac tctatgaict cgtgttagg cttcttggc aatggcttgg tgcctatgt cctataaaa acctatcaca agaagtcagc ctccaagta tacaatgaa attagcagat agcagatccta cttgtgtgt gcaacagtc tctcgtgtgt gctatattg ttcaaaaagg catttggctc tttggtagct tcttggccg cctcagacc tatgttgggt atgtcaacct ctattgttag alcttcttta tgacagccat gagcttttc cgggtgcatg caattgttt tccagtcag aacatgaat tggttacaca gaaaaaagcc aggttgtgt gtagggat ttgattttt gtgatttga ccagttccc atttctaa gccaaccac aaaaagaiga gaaaaataat accaagtgct ttgagcccc acaagacaat caaacaataa atcattgttt ggcttgcct tatgtgtat tttgttgg cttaatc accaagtgct ttgatttga ttaataatgt ctgttacaca atgacattt tgccttact aaaaaataca algaaaaaaa aicigtacag tcaaaaaag gctataggaa tgaataggt cgtgaacct gcttttttag tgcatttcat gccatctat altcaagta ccatcact tcaattttta cacaatgaaa ctacaaccttg tgattctgc cttagaatgc agaagtcctt ggctalaacc ttgtctcagg ctgacacaa ttgtgtctt gacctctcc tatattct ttctgggggt aacttttaga aaaggctgtc tacattcaga aagcatctt ttgtcagcgt gactatgta cccagaaaaa agggctcttt ggcagaaaaa ggagagaaa tatglaaagt atag	A	Homo sapiens
547	177168	Cysteiny Leukotriene CYSLT1 Receptor	NP_006630.1	MDETGNLTYS SATCHDTIDD FRNQVYSTLY SMISVVGFFG NGFVLVLIK TYHKSAFQV YMINLA VADL LCVCITPLRV VYVHKGIWL FGDFLCRLST YALYVNLVCS IFMTAMSF RCIAIVFPVQ NINLVTQKKA RFVCVGIWIF VILTSSPFLM AKPQKDEKNN TKCFEPQDN QTKNHVLVLH YVSLFVGFII PFVIIVCYT MIILTLKKS MKKNLSSHKK AIGMIMVVTA AFLVSFMPYH IQRTHLHFL HNETKPCDSV LRMQKSVVIT LSLAASNCCF DPLL YFFSGG NFRKRLSTFR KHSLSSTVTV PRKKASLPEK GEEICKV	P	Homo sapiens
548	177191	Histamine H3 Receptor	NM_007232	ccacggctcc gccggctgca cggctgcacc ggacggggt caggctccgg ctctctccc gctgcagcag ccggcgtgcc ggccccatcg ggctcggatc cggcccccgg cccctcggca ccgctcgtct tggcccccgg cccggccccg cggaccatgc gctggggccc ccagggggaa acccgaccog gccaaaggcc cgcacaagacg aggtctccgg gccggggggccc ctcccggccc ccagctctc ggccggcgcc ctgcgcccg tccggagacc ggctgagctt cggggggccat ggagcgcgcg ccggccggagc ggcccgctgaa cgtctcgggg ggctcggcg ggcatgcggc ggccggcgccg gcttcggcg agctcggcc agccgggacc ggcggtcgg ccggctcat ggcgctgtc atcgtggcca cgggtgtggg caacgcgcgt gtcagctcg ccttcgggg cgactggagc ctccgaccc agaaacaatt ctctcgtc aaotcgoca tctcgacti cctcgtcgcc gcctctgca tcccactgta tgaacctac gtgtcgtacag gccgctggag ctccggccc ggccctcgtc agctgtggct ggtagtggac taoctgtgt gcaacctctc tgccttaac atcgtctca tcagctacga ccgctctcgt tccgtcaccc gagcggctc ataccggcc cagcagggtg acacggcg ggcatgtcgg aagatgtcgt tgggtgggt gctggcttc ctgtctacg gaccagocat cctgagctgg aggtacctgt ccggggggcag ctccatccc gagggccact gctatggcga gttctctac	A	Homo sapiens

549	177191	Histamine H3 Receptor	NP_009163.1	<p>aactgtgtaact tccatcatc agcttccacc ctggagttct ttacgcccct cctcagcgtc acctttta acctcagcat ctaccigaac atccagagc gcaaccgctt ccagcttggat ggggctcag aggcagccgg ccccgagccc cctcccgagg cccagccctc accaccccc ccccttggct gctggggctc ctggcagagag gggcaccgggg agcccaatgcc gctgcacaggg tatggggggg gtgagggggc cgtggggctt gaggccgggg aggcagacct cggggggggg gggggggggg gctcggggggg ttaccccc tccagctccg gcaagctcc gagggggacct gtagggggc gctacacaa gaggggggctt aagccggcggc cgtccctggc ctcgtcggag aagggcagla gtaggggct ccaagctc accaagcgt ttggcgtc tgggggagag aaggggggca agtcgtggc cgtcagct agcacttg agccctgg gggcccatat acgctgctga tgaatccg gggccgctgc cagggccat gctccctga ctactggat gaaacctct tctggctctt gggggggcaac tgggctgca accctgctt ctaccctc tggccacca gctccggcg ggccttacc aagctgctt gggcccaagaa gctcaaaatc cagccccaca gctccctgga gcatctggg aagtgagg cccaccagag cctccctcag ccaagccctt ctacggccag gctccggg catctggccc tctggccc taccggctc gttcccccag gggggagggc cgtcgtgctt gggggctct cttaalgcca cggcagggc cctggcag agggcgctc ctggggggc cagagggggc ctactggctt gggactggaggg ctggggggcc ggggctggc cccactct ggtccaccg ggggggggaca gctgggggg ccaagagag ctggccacc cctgctggg ccacccctc gcatgtact gttgggtc ttccaaagc aagcaccctgg gttggctcca ggtctccg cctagcagtt tggctcga cgtgcacaa cctgcacac cctgcacac gttccctc gttccctc cgggagaggg ccaagggacct gcttggctg ccttctct ctggcaga cctagggct gggcttca ccccttcc caccactt ctggccc aaaaagctca agggggccca ggaaacctga agctgtctc tggcttcca tctgggggt ttccagaaag atgaaagaga aaaaagctc gtagaactga tggctgggg atgttaac aagagagaca aaatgctga ggaagctcagg gctgggaggg caggtggggg ctccaccggc ctccctc cgtaaaggct tccggctgag ctggccagc tggctggc caccggct ctggggctac accagggctc gggggcagag ctggccggc cactctgt gctacccag gactctggg ggttgggg aggaagggggc cgggctgggg cggaggggtc caaaggctc agggggggct cagagggagg gggggggcagg gggggcttc gccaagct gttcagggct gccaagcgt ctcagctc ctggctgt gggggctc ctggccctga aaccgtgagg tcaaaalaa gttatttt ttaaaaaa aaaaaaaaa aaaaaaa</p>	P	Homo sapiens
550	177387	G Protein- Coupled Receptor ORF4	NM_020155	<p>MERAPPDGPL NASGALAGDA AAAGGARGFS AAWTAVL AAL MALLIVATVL GNALVMLAFV ADSSLRTQNN FFLNLAISD FLVGAFCLP YVPYVLTGRW TFGRGLCKLW LVVDYLLCTS SAFNVLISY DRFLSVTRAV SYRAQQGDTR RAVRKMLLVW VLAFLLYGPA ILSWEYLSGG SSIPGHCYA EFFYNWYFLI TASTLEFFTP FLSVTFNLS IYLNQRRTR LRLDGAREAA GPEPPPEAQP SPPPPQGWG CWQKGHGEAM PLHRYGVGEA AVGAEAGEAT LGGGGGGSV ASPTSSSGSS SRGTERPRSL KRGSKPSASS ASLEKRMKMV SQSFTQRFRL SRDRKVAKSL AVIVSIFGLC WAPYTLLMII RAACHGHCVP DYWYETFSWL LWANSVNPV LYPLCHHSFR RAFTKLLCPQ KLKIQPHSSL EHCWK agggggct ggcctgac gagggtatc agccggctc cccctccac cccagggagca calgaagac cagggacag gagctctc ctggggctc tgcacccc catctggc ctgggggag gcccagggag gagaacccc caacccat ccggctc ctggagaaa gtagctgcc ttccagccc ctgagtgagg gggctggggc caggctgctt ggttccca agggcagggg tctctgtt gaggaggggg gctgctcag cacaactct ttctctga gggggccatc tccctctg caccctgcaa ttccacccc ttccatatta ttccctgt cccggcgaca gttccctt gttgtctcc ggggagag cctccctcc tgacalgagg agtaacctgt cggcctgg gctgctgoc gggctggggc ctggcctc accctgggg tgacagctc ctacaccac ctgtagcc tgcctctt ctccctat gcccagctt ggtgggtt ctgtatgg cacaagc tcagctatca gagggtgtc ctggggctt gttgtctc gggcgccgtc gttaccac tcttctt ctactcca galactccc</p>	A	Homo sapiens

551	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	<p>gcgcacacgc cctggggccc tgcctctc cgtctctc cgtctgccc gctgctgc agtctac cttgacgtt atgaacctt acttggcca ggttggttc aaggccaagg tgaagcgtcg gccggagag agccgaggtt tgcgtcgt cggaggggc ttgggggg cctcgtct cttctcgt gtagcgtcg tggtagcgt gctctccat cggcgccac agccctgggc cctcgtct gtcgcgtcc tggtagcga cctcgttc gtaicgtcg cgtctctt tgcgtcgt cctcgtcc tgcagcgg gcgcccca ctgacatca cctggggcc aaggtagggc tgcagcagc agtccaggt gcttttggg tctcggga gcggttcca ggggttagag</p> <p>MESNLSGLVP AAGLVPALPP AVTLGLTAAY TTYALLFFS VYAQLWLVL</p> <p>YGHKRLSYQT VFALCLLWA ALRITLFSFY FRDTPRANRL GPLPFWLLYC</p> <p>CPVCLQFFTL TLMNLYFAQV VFKAKVKRRP EMSRGLLA VR GAFVGASLLF</p> <p>LLVNVLCVAVL SHRRAPQWAL LLVRVLVSDS LFVICALSLA ACLCLVASGR</p> <p>PPLASTWRPR</p>	P	Homo sapiens
552	180956	Lysophosphatidic Acid Receptor Edg7	NM_012152	<p>ctctttaaa ttctttca ggaattcac ttcttcca caatgaatga ggtgcacat gacaagcaca tggactttt ttataatagg agcaacacgt alactgtcga tgcgtgaca ggaacaaagc ttgtgtgt ttgtgtgt gggacgttt tgcctgtt tatttttt tctaatctc tggatcgc ggcagtgatc aaaaacagaa aatttcatt ccccttacc taccgttgg ctatttagc tgcgtccgat ttctcgtcg gaaatgocct tttattccg agttttaaca caggcccgat ttcaaaaact ttgacttca accgttgggt tctcgtcag gggctctgg acagtagctt gactgtctc ctaccaact tgcgtgtat cgcgtggag aggcacatgt caatcagag gatcggggc calagcaacc tgaacaaaaa gagggtgaca ctgctcatt tgcgtctcg gggcctgc attttatgg gggcggtccc cacatgggc tggatggc tctgcaacat ctgctcgtc tctcctcg ccccaftta cagcaggggt taccttgttt tctggacagt gtcaaccic alggccttc tcatcaltgt tgggtgtac ctgcgtact acgtgtact caagaggaaa accaagctt tgcctcgca tacaagtggg tccatcagcc gccggagagc accatgaag ctatgaaga cgtgtatgac tgtctaggg gcgtttggg latcgtgac cccggggcgg gttgtctcg tctcgtcgc cctgaactgc aggcaggttg gcgtgacga tgtgaaagg tggttcgtc tgcgtcgtc gtcaactcc gctgtgaacc ccatcacta cctcacaag gacgagaca tgtatggcac catgaagaag atgactgt gctcttca ggaagaacca ggaaggcgtc cctcgtcat cctccaca gtctcagca ggaagcac aggcagccag tacaatagg alagttatag ccaagggtga gcttgcata aagcacttc ctactcgt ggtcctc ggcaccca ggtgagact gcttagg</p> <p>MNECHYDKHM DFYNRSNID TVDDWTGTL VVLCVGTFF CLFIFFSNL</p> <p>VIAA VIKNRK FHFFYYLLA NLAAADFFAG IAYVFLMFNT GPVSKLTVN</p> <p>RWFLRQGLLD SSLTASLTNL LVIAVERHMS IMRMRVHSNL TKKRVTLLIL</p> <p>LVWAIAIFMG AVPTLGWNCL CNISACSSLA PIYSRSL VF WTVSNLMAFL</p> <p>IMVVVYLRV YVVKRKTNL SPHTSGSISR RRTPMKLMKT VMTVLGAFVV</p> <p>CWTPGLVLL LDGLNCRQCG VQHKRWFL LALLNSVNP IYSYKDEDM</p> <p>YGTMKKMICC FSQENERRP SRPSTVLSR SDTGSQYIED SISQGAVCNK STS</p> <p>algggcccg gcgagcgt gctggcgggt ctctgttga tggactggc cgtggcgtcgt ctatcaacg cactgggt gctttgtc gctacagcg ctgactccg cactgagcc tgggttcc tctgttga tctgtctc gggcactcg tgcgtcgc gctggacatg ccttcacg tgcgtgggt gatgcggg cggacacctg cggcgcccg cgtatgcca gtcattgct tctggcac ctcttggcg tcaacgcgg cgtgtgagct gggcgcgctg agcgagac accgtggc agtgggtc acatgctc agcgcgagc ccttggacog cgtatggcg gcttgcgt gggctgtgccc tggggacagt cgtggcct ctacggcgt gacttggct gctgtggct tgggtacagc agcgctcgt cgtctgtc gctgtgct cggccgagc ctgagctcc ggccttgcga gcttcacgc ccacgtcca tgcgtgggg tctgtgtc gctgtgct gcttgcct accctgctc aggtgacog ggtggcacg agacactgc agcgatgga caccgtacc atgaaggcg</p>	A	Homo sapiens
553	180956	Lysophosphatidic Acid Receptor Edg7	NP_036284.1	<p>gcgcacacgc cctggggccc tgcctctc cgtctctc cgtctgccc gctgctgc agtctac cttgacgtt atgaacctt acttggcca ggttggttc aaggccaagg tgaagcgtcg gccggagag agccgaggtt tgcgtcgt cggaggggc ttgggggg cctcgtct cttctcgt gtagcgtcg tggtagcgt gctctccat cggcgccac agccctgggc cctcgtct gtcgcgtcc tggtagcga cctcgttc gtaicgtcg cgtctctt tgcgtcgt cctcgtcc tgcagcgg gcgcccca ctgacatca cctggggcc aaggtagggc tgcagcagc agtccaggt gcttttggg tctcggga gcggttcca ggggttagag</p> <p>MESNLSGLVP AAGLVPALPP AVTLGLTAAY TTYALLFFS VYAQLWLVL</p> <p>YGHKRLSYQT VFALCLLWA ALRITLFSFY FRDTPRANRL GPLPFWLLYC</p> <p>CPVCLQFFTL TLMNLYFAQV VFKAKVKRRP EMSRGLLA VR GAFVGASLLF</p> <p>LLVNVLCVAVL SHRRAPQWAL LLVRVLVSDS LFVICALSLA ACLCLVASGR</p> <p>PPLASTWRPR</p>	P	Homo sapiens
554	189873	G Protein-Coupled Receptor GPR78	AF411107	<p>ctctttaaa ttctttca ggaattcac ttcttcca caatgaatga ggtgcacat gacaagcaca tggactttt ttataatagg agcaacacgt alactgtcga tgcgtgaca ggaacaaagc ttgtgtgt ttgtgtgt gggacgttt tgcctgtt tatttttt tctaatctc tggatcgc ggcagtgatc aaaaacagaa aatttcatt ccccttacc taccgttgg ctatttagc tgcgtccgat ttctcgtcg gaaatgocct tttattccg agttttaaca caggcccgat ttcaaaaact ttgacttca accgttgggt tctcgtcag gggctctgg acagtagctt gactgtctc ctaccaact tgcgtgtat cgcgtggag aggcacatgt caatcagag gatcggggc calagcaacc tgaacaaaaa gagggtgaca ctgctcatt tgcgtctcg gggcctgc attttatgg gggcggtccc cacatgggc tggatggc tctgcaacat ctgctcgtc tctcctcg ccccaftta cagcaggggt taccttgttt tctggacagt gtcaaccic alggccttc tcatcaltgt tgggtgtac ctgcgtact acgtgtact caagaggaaa accaagctt tgcctcgca tacaagtggg tccatcagcc gccggagagc accatgaag ctatgaaga cgtgtatgac tgtctaggg gcgtttggg latcgtgac cccggggcgg gttgtctcg tctcgtcgc cctgaactgc aggcaggttg gcgtgacga tgtgaaagg tggttcgtc tgcgtcgtc gtcaactcc gctgtgaacc ccatcacta cctcacaag gacgagaca tgtatggcac catgaagaag atgactgt gctcttca ggaagaacca ggaaggcgtc cctcgtcat cctccaca gtctcagca ggaagcac aggcagccag tacaatagg alagttatag ccaagggtga gcttgcata aagcacttc ctactcgt ggtcctc ggcaccca ggtgagact gcttagg</p> <p>MNECHYDKHM DFYNRSNID TVDDWTGTL VVLCVGTFF CLFIFFSNL</p> <p>VIAA VIKNRK FHFFYYLLA NLAAADFFAG IAYVFLMFNT GPVSKLTVN</p> <p>RWFLRQGLLD SSLTASLTNL LVIAVERHMS IMRMRVHSNL TKKRVTLLIL</p> <p>LVWAIAIFMG AVPTLGWNCL CNISACSSLA PIYSRSL VF WTVSNLMAFL</p> <p>IMVVVYLRV YVVKRKTNL SPHTSGSISR RRTPMKLMKT VMTVLGAFVV</p> <p>CWTPGLVLL LDGLNCRQCG VQHKRWFL LALLNSVNP IYSYKDEDM</p> <p>YGTMKKMICC FSQENERRP SRPSTVLSR SDTGSQYIED SISQGAVCNK STS</p> <p>algggcccg gcgagcgt gctggcgggt ctctgttga tggactggc cgtggcgtcgt ctatcaacg cactgggt gctttgtc gctacagcg ctgactccg cactgagcc tgggttcc tctgttga tctgtctc gggcactcg tgcgtcgc gctggacatg ccttcacg tgcgtgggt gatgcggg cggacacctg cggcgcccg cgtatgcca gtcattgct tctggcac ctcttggcg tcaacgcgg cgtgtgagct gggcgcgctg agcgagac accgtggc agtgggtc acatgctc agcgcgagc ccttggacog cgtatggcg gcttgcgt gggctgtgccc tggggacagt cgtggcct ctacggcgt gacttggct gctgtggct tgggtacagc agcgctcgt cgtctgtc gctgtgct cggccgagc ctgagctcc ggccttgcga gcttcacgc ccacgtcca tgcgtgggg tctgtgtc gcttgcct accctgctc aggtgacog ggtggcacg agacactgc agcgatgga caccgtacc atgaaggcg</p>	A	Homo sapiens

555	189873	G Protein-Coupled Receptor GPR78	CAC34041.1	<p> tgcgcgtgct cgcgcaccctg caocccagtg tgcggcacagg ctgcctcalt cagcagaagc ggcgcgcgcca ccgcgcacacc aggaaagtg gcaitgctat tgcgacctc ctactgct tgcgccgla tgcaltgacc aggcitggcgg agctcgtgccc cttcgtacc gigaacgccc agtggggcat cctcagcaag tgcctgacct acagcaaggc ggtggccggac ccgttcacgt acitctgct ccgcggccgg tccgccaag tccggccgg catggcgac cggcgtcgtga agagaacccc gcgcccagca tcccccaltg acagctctct ggalgtggcc ggalgtggc accagctgct gaaaggaacc ccgcgcgcag cgtccaccca caacggctct gggacacag agaaatgct ctgcctgag cagacacact ga MGPGEALLAG LLVMVLAVAL LSNALVLLCC AYSaelRTRA SGVLLVNLSL GHLILAALDM PFTLLGVMRG RTPSAPGACQ VIGFLDTFLA SNAALSVAAL SADQWLA VGF PLRYAGRLRP RYAGLLGCA WQSLAFSGA ALGCSWLGYs SAFASCSLRL PEPERPRFA AFTATLHVG FVLPLAVLCL TSLQVHRVAR RHCQRMDTVT MKALALLADL HPSVRQRCLl QQKRRRRHRAT RKIGIAIATF LICFAPYVMT RLAEVPFVT VNAQWGLSK CLTYSKAVAD PFTYSLRRP FRQVLAGMVH RLLKRTPRPA STHDSSLDVA GMVHQLLKRT PRPASTHNGS VDTENDSLQ QTH </p>	P	Homo sapiens
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557	189874	Neuromedin U Receptor 2	NP_064552.1	<p> tcttagta acagatgca agaaacaact atcaagctt ccacttaac aaaactga MEKLQNASWI YQKLEDPPFQ KHLNSTEEYL AFLCGPRRSH FFLPVSVVYV PIFVVGIGN VL VCLVILQH QAMKTPNTY LFSLAVSDLL VLLGMPLEV YEMWRNYPFL FGPVGCYFKT ALFETVCFAS ILSITTVSVE RYVAILHPFR AKLQSTRRA LRILGIVWGF SVLFLPNTS IHGKFHYFP NGSLVPGSAT CTVIKPMWY NFIIQVTSFL FYLLPMTVIS VLYYLMALRL KDKSLEADE GNANIQRPCR KSVNKMFLV VLVEAICWAP FHIDRLFFSF VEEWSESLAA VFNLVHVVSQ VFFYLSSA VN PIYNLLSRR FQAAFNQVIS SFHKQWHSQH DPQLPPAQRN IFLTECHFVE LTEDIGPQFP CQSSMHNSHL PTALSSEQMS RTNYQSFHFN KT </p>	P	Homo sapiens
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 tgttaaatag

559 189884 G Protein- ENSMPRT1140 P Homo
 Coupled Receptor 67 sapiens
 Ls189884

MLAAAFADSN SSSMNVSAF LHFAGGYLPS DSQDWRTIIP ALLVAVCLVG
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 DQETGEGV

560

189895 NM_031936

G Protein-
 Coupled Receptor
 GPR61

Homo
 sapiens

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561

189895 NP_114142.1

G Protein-

MESSPIQSS GNSSTLGRVP QTPGPSTASG VPEVGLRDVA SESVALFFML

Homo

sapiens

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DFRIQAR

Homo sapiens

A

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FVGILAAICA LYARIYQVR ANARRLPAR GTAGTTSTRA RRPRLSLAL
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Homo sapiens

P

Coupled Receptor
GPR61

562 189900 Sphingolipid Receptor Edg8 NM_030760

563 189900 Sphingolipid Receptor Edg8 NP_110387.1

564 189901 G Protein-Coupled Receptor Ls189901 (HEOADS4) LG94029

565	189901	G Protein- Coupled Receptor Ls189901 (HEOAD54)	CAC38933.1	<p>ggccaccgg gcagctggcc ccagggaagc acggctcagc acgtggggg gcgcaccac cttcaggtag cggtagaglg cgalggctgt gaggaagaca acgtggggc tgcgggttgt ggacagcatg aagaggttga ctttgaggc agcagcccca aagcgccagg tctatggag gaggttagag tccagcggga gggcgagggt gcgatcagg aggaagtcag cggccaccag gcigaccagg aacaccgtgt tggaggcca gggcgcgltg tggatcaga agatgaagag ggccaactg ttcccacca ggccaggac aaactcagg gccaggatg gtcaggga ggccagacc agcaggaag aggtggggg gcagggccct ccaggagcc cccaccagt ggtaaggc</p> <p>MELHNLSPS PLSLSSVLPP SFSPSPSSAP SAFTTVGGSS GGPCHPTSS LVSFLAPIL P ALEFVLGLVG NSLALFICI HTRPWTSNTV FLVSLVAADF LLISNLPLRV DYLLHETWR FGAAACKVNL FMLSTNRTAS VFELTAIALN RYLKVVQPHH VLSRASVGAA ARVAGGLWVG ILLNGHLL STFGSPCLS YRVGTPKSAS LRWHQALYLL EFFLPLALIL FAIVSIGLTI RNRGLGGQAG PQRAMRVLAM VVAVYTICFL PSIFGMASM VAFWLSACRS LDLCQLFHG SLAFTYLSNV LDPVLYCFSS PNFLHQSRAL LGLTRGRQP VSDESSYQPS RQWRYREASR KAEALGKLV QGEVSLEKEG SSQG</p>	Homo sapiens
566	189904	Purinergic Receptor P2U2 (GPR91)	NM_033050	<p>ggtaggtt taactcagca gaatttgtt aacaactacg acatgcagg gatcaggca tggaaigcaa ctfgcaaaaa ctggcaggca gcaggcgtg ccttggaaa giactacct tcaattttt atggataga gtctgttg ggagccttg gaaataccat tgttgttac ggctacatct tctctgaa gaactggaa agcaglaala ttactctt taactctt gtctcgtact tagctttct gtgcacctc cccatctga taaggagtia tggcaatgga aactggatat atggagact gcctgcata agcaacogat atgtcttca tggcaactc tataccagca ttctttct cactttatc agcalatgac gatactgat aattaagtat ccttccgag aacactctt gcaaaagaaa gagttgcta tttaactc ctggccatt tgggttttag taacttga gttactacc atactccc ttataaacc tgtataact gacaatgga ccaactgaa tgaattgca agtctggag acccaacta caactcatt tacacalgt gtciaact gtggggtc ctattctc ttttgtat gtgttctt tattacaaga ttctctct ctaaaagcag aggaataggc aggtgtctac tgcctgcc ctfgaaaagc ctctcaact ggicalcag gcagtgtaa tctctctgt gcttttaca cctatcag tcalcgga tgtgagatc gcttcagcc tggggagtg gaagcagat cagtgcactc aggtcgtcat caactcctt tacatttga caggcctt ggctttctg aacagtgtca tcaacctgt ctctattt ctttggag atcactcag ggacalgtc atgaatcaac tgaagacaaa ctcaatcc cttaactct ttacagatg ggctcagatg cctacttt cattcagaga aaagtgaagg gcttggaaa cagattgtc tacagatgaa tctgaagcc agttacagt tgccttaact calagacatc aatcagagag tgtcacagat ttaccttga tctaaagaca agttgtacc agagtatg aaaaagaatgg gacgacaaga atgtactgt ttctctct aagaattgaa aggagtga ctgcctatg ttggcag taaatcaaa atactagga gtataaggct ttctaatca gtgcaaaaat ggaaatata taagcaaca agttgtctg attgtatcac tggcagatt gtataaaaaa aaaaaaaa</p> <p>MAWNATCKNW LAEEALEKY YLSIFYGIEF VVGVLGNTIV VYGYFSLKN P WNSSNYLNL LSVSDLFLC TLPMLIRSYA NGNWTYGDVL CINSRYVLHA NLYTSILFT FISIDRYLII KYPFREHLLQ KKEFALLISL AIWVLVLEL LPILPLNPV ITDNGTTCND FASSGDPNIN LIYSMLCLTL GLPLFVMC FFYKIALFL KQRNRQVATA LPLEKPLNV IMAVVFSVL FPTYHVMRNV RIASRLGSWK QYQCTQVWIN SFYIVTRPLA FLNSVINPVF YFLLDHFRD MLMNQLRHNF KSLTSFSRWA HELLSFREK</p>	Homo sapiens
568	189920	G Protein- Coupled Receptor GPR63 (PSP24)	NM_030784	<p>tggagcaalg ctccctggc tctccggc gcgcccgc gcctgccctc gctlgagca aaaggactct tgttgaagat A ggaactcatt giccatitc cagaatgat ttcaagccc alcaatggga cctgactcgt ctgtctgtg ttgaatgct tgaagaactc ctgactct gcttgactc tcatctac tgaaccalg gtctctcagg cagtgttgc tgcgttccat accgggacat ccaacacaac</p>	Homo sapiens

(beta)

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569 189920 G Protein- NP_110411.1
 Coupled Receptor
 GPR63 (PSP24
 beta)

P Homo
 sapiens

MVFSAVLTAF HTGTSNTTFV VYENTYMNIT LPPPFQHPDL SPLRYSFET
 MAPTGLSSLT VNSTAVPTP AAFKSLNPL QITLSAIMIF ILFVSFLGNL
 VVCLMVYQKA AMRSAINILL ASLAFADMLL AVLNMFPALV TILTRWIFG
 KFFCRYSAMF FWLFVIEGVA ILLISIDRF LIIVQRQDKL NPYRAKVLIA VSWATSCVA
 FPLAVGNPDL QIPSRAPQCV FGYYTNPYQ AYVILSLIS FFIFLVILY SFGMLNLT
 HNALRIHSYP EGICLSQASK LGLMSLQRPF QMSIDMGFKT RAFTTILIF
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570 189945 G Protein- AK027843
 Coupled Receptor
 DJ287g14.2

A Homo
 sapiens

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571 189945 G Protein-
Coupled Receptor
Dj287g14.2 BAB55406

572 190026 G Protein-
Coupled Receptor
JEG18 NM_032553

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574	190031	G Protein- Coupled Receptor VLGR1	AF055084	attactglat atglatglat icagccgiga ttoccaaagg ttactttat gacagcatct ttctgattc ctacagttt attacttcc cattgcccac gtttagaac ttatattag ttggcttc giacaggcac cactcattgg gagcaacaca gaaatcgtt tcaaaacatc atttcaggaa aagaagaata tttagcgtt gagalcgtt aaaaagtatg cagtacttia tagaactaag tttagggagc taaggagatc tttaattca tgciaagcaa ttatglat ttgtgttg ttgtattia tttagttg ctgttgaga cttggagaagg gggatgatt ttaccattca agaaaalggg ctccagatag atcaacttcc tgaataggaa aacalcacca ttgtcgcat cataataalg aaaaalggata acgcagaagg catcatigaa ttgaccaca agtatatcgc ctgcgaagtg gaggaagagtg ttggcgtgat calgatcca gtggagggc tacatggaaac ttatggctat gtgacagctg atttacttc tcaagcttcc tctggcagtc ccggagggtt tgaattacat ttgcatggca gtacagtcac ctttcagcat gggcaaaact taagtttat aaatalctoc alcattgat acaatgaaag tgaatttgag gagccattg aaatttact cactggagct actggaggag cggctcttgg gcgcaccta gtgagcagaa tcalaalagc taaggatgac tctccttg gagtataag gtttcaat caaagcaaaa ttctattgc taatccaat tccacaatga ttatcact gggtctggag cggactggag gactcttggg agagattcag gtaacttggg agacagtagg accaaact caagaagcct tactggcaca gaalagagac atggcagacc cagttagcgg gttgttctat ttggagagag gagaaggagg agttagaao ataattctga caatctatcc tcatgaagaa atgaagtg aagagacat catattaaa ctcatctg tgaaggaga agctaaatta gactccagag ctaaaagatg tacaatacc alacaagagt ttgttgaoc aaatggagt gttaggttg ctctgaaac ttgtctaaag aaagattat cagagcctct ggccttggaa gggcccttgc tcaattact cttgtcaga agagtcaagg gcaccttgg agagattalg gttacttggg aatlaagtag tgaattgac attactgaag acttttllc caccagtgga ttittacca ttgtctgagg agagagtgaa gctagcttg algtcatt gctaccagat gaggttacttg agatagagga agatlaigt alcacgttg ttctgtaga gggaggagcc gaacttggatc tggagaaag tatcacatgg ttcttgtt algtcaatga tgaaccacat ggagtattg cccttattc ggalcggcag tcaalactia ttggcagaa cctattaga tcatcaaaa ttaacataac ccgcttgc tggaaattg gagatgtggc tgttggcct cgaatalcat cggatcalaa agacagcccg attgtaccg aaaaagcaga gagggcagctg gtgtcaaaag atgtggcac alataaagt gacttgggt caataaagaa tcaagcttct ctatcactgg gcttcaatt cacttggcaa ctgttgaatg tgaatctgt cgggtggagt ttctatggaa tgcacaal tcttcaggaa gcaaaatctg ctgtctoc agtcttgag aaagctggca atttcaggt cggattgaa tccactgt tcaactat gaacatcat gctggcaca gccacgtat gatttclag agagacat atggagctct ctggggcc tgggaccag gatagctcc tgggttagaa attcgtgaat tcatgtgt tggcaacatg acccaacac tggggagcct ttacttcc cactgtgaac aagggaagg agtttcttg tggagctt ctggccctgg	A	Homo sapiens

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 aaaaattcaa gctttcagtt tggcaggg aacttttc latgaggtc ttgtctc tattaacca agcgcaag acatgggg
 attcagttac ttgtgtgag ttgagaa ttgtctt tctgtcga ctatgtac ttgggtc cctgtgtgaa aaagcaaac
 calctgtat agttggccat attgtcaat attgtctt cactgtat caggtatc ctacgcaat caatggcac aagtgtgag gaaggggaag
 agattacat cgaattccag agaggtact ggaatccag galtgcaaa latgggtc gaaagataa ttgaaatag
 locagttac aggtatagc agcaacagtt ggtttaaag ttgaaacat ctcttacc taaaataaa gttattatc ttgagttga
 aaagtcagag ttcaaatc ctgactaag acatgagtt tctacaggt attatgtc ctggggcag aattatct cagacalc
 tgtgtctc ttgaaatcag gctgtgcaa gctgtgtc ttgacagttc ttgtgaaag ttgtgagaa aactgcaag tatgtgaaat
 gttgggtc acatgtct gttatgctc tctgtcag gactgaaac ttgtctat acatgaaag cttctact tctggattta
 tatgtatc aggtcttgc ttgccat ctctgtcc aggtatc ttgtgagc ttatgtc actcagta
 ttgcaagcag ctatgtcagtt ttctgtgtc ttgcaagc agttccaa cgtgtgag gaaagttca
 gctatggctc ctgtacaa ttactgtat cttggcag ttgtgagtt gttcagtt tctgtgagtt gttgtgag
 aatgagag acacagagag gctgtatc ctgtttcc ttgtgagtt ggtgactaca gctttgtg gttatctc catgttat
 ttgaaagaa tctatca gaaatgca cagatctat gactatca ttgtgactc ttgtatc caaacgta gctgtgtg
 ttactgag ctctgtcc ttgaggtc ctgtgtgtg ttgtgtgt gttatcact gttacacag ttgagcaca gttgaaagca
 tatgagag tcttcaagag aaagaaat gctgtgaa ttccatgt ttgtctga ttccgtgac aggtgtg

575	190031	G Protein- Coupled Receptor VLGR1	AAD55586.1	<p>ggaggactac aca1ggccia cagacacitc 1ggat1ggg tictctgtt caitticiaac agt1cgagg gacttiatgt tticalggtt tatttattt lacacaacca aatgtgttc cctalgaagg ccagttacac 1gtggaat1g aatgggcatc ctggaccag cagagccitt ttacgcoog ggagt1ggaat gccctctgt ggagg1gga1a 1cagcaagtc caccagaat c1catcggtg ctalggagga gg1gccacct gact1ggaga gaggatcctt ccaacagggc ag1cagcca gccctgattt aaagccaagt ccacaaatg gagccaogtt cccgtctct ggaggat1g gccagggtc act1gatacc gat1gaggagt cccaggagt1 1gatatt1a atatt1gcat ta1aaact1gg 1gctgctc agt1gcagtg ata1gaalc 1ggtcaggc agccaggagg gggggcacctt gactgactcc cagatc1gg agt1caggag galaccatc gcagacacitc acc1gtagca cctcactaac cactcagactg agcacactt calatt1gia 1cagctt1g 1gctaaact c1ctaag1ac atccacc1gt g1a1a1gga cct1g1gaatt g1act1ggatg at1a1a1caa acgt1gatt1g 1g1att1gga g1a1a1a1a c1gat1gat1 g1gac1c1gaa aaitc1c1gc 1a1a1gaa1g g1ggag1cag tt1gtatcag 1a1a1taggat g1tcalat1c caaggat1at agt1gtttt 1a1a1catcc 1a1a1ggc1a acatt1gt1a 1a1ga1a1g1a1a 1a1tca1a1a agca1a1g1a1a 1ct</p> <p> MQLCIFCCCC ILFYFDLYDF GRGYDFTIQE NGLQIDQPPE IGNISIVRII IMKNDNAEGI P Homo IEFDPKYTAf EVEEDVGLIM IPVVRLHGTy GYVTADFIQq SSSASPGGVD sapiens YILHGSTVTF QHQGNLSFIN ISIDDNESF FEEPIELLT GATGGAVLGR HLVSRIIAK SDSPFGVIRF LNQSKISIAN PNSTMILSLV LERTGGLLGE IQVNWETVGP NSQEALLPON RDIADPVSLG FYFGE GEGGV RTILITYPH EEIEVEETFI IKLHLVKGEA KLDSRAKDVLT IQEFGDPN GVVQFAPETL SKKTYSEPLA LEGPLITTF VRRVKGTGFE IMVYWELSSF DITEDFLST SGFFTIADGE SEASFDVHLL PDEVPEIEED YVIQLVSVEG GAELDLEKSI TWFSVYANDD PHGVFALYSD RQSLIGQNLR IRSIQNITR LAGTFGDVAV GLRISSDHKE QPIVTENAEER QL VVKD GATY KVDVVPKINQ VFLSLGSNFT LQLVTVM LVG GRFYGMPTIL QEAKSAVL PV SEKAANSQVG FESTAFQLMN ITAGTSHVMI SRRGTYGALS VAWTTGYAPG LEIPEFIVVG NMPTLGSLS FSHGEQRKGV FLWTFSPGW PEAFLVHL SG VQSSAPGGAQ LRSGFIVAEI EPMGVFQFST SSRNI VSED TQMRLHVQR LFGFHSDLIK VSYQTTAGSA KPLEDFEPVQ NGELFFQKFQ TEVD FEITII NDQLSEIEEF FYNLT SVEI RGLQKFDVNW SPRLNLD FSV AVITLDNDD LAGMDISFPE TTVA VAVDIT LIPVETEST YLSTSKITTI LQPTNVVAIV TEATGVSAIP EKLVLHGTP AVSEKPDVAT VTANVSIHGT FSLGPSIVYI EEMKNGTFN TAEVLIRRTG GFTGNVSITV KTFGERCAQM EPNALPFRGI YGISNLTWAV EEDFEEQTL TLFLDGERE RKVSVQILD DD DEPEGQEFFY VFLTNPQGA QIVEGKDDTG FA AFAMVIT GSDLHNGIIG FSEESQSGLE LREGAVMRRL HLIVTROPNR AFEDVKVFWR VTLNKTVVVL QKDGVNLMEE LQSVSGTTTC TMGQTKCFIS IELKPEKVPQ VEVYFFVELY EATAGAAINN SARFAQIKIL EDESQSLVY FSVGSRLA VA HKKATLISLQ VARDSGTGLM MSVNFSTQEL RSAETIGRTI ISPAISGKDF VITEGTLVFE PGQRSTVLDV ILTPETGSLN SFPKRFOIVL FDPKGGARID KVVGTANITL VSDADSQAIW GLADQLHQP V NDDILNRVLH TISMKVATEN TDEQLSAMMH LIEKITTEGK IQAFSVASRT LFYEILCSLI NPKRKDTRGF SHFAEVTENF AFSLLTNVTC GSPGEKSKTI LDSCPVL SIL ALHWYPPQIN GHKFEKGED YRIPERLLD VQDAEIMAGK STCKLVQFTE YSSQWFI SG NNLPTLKNKV LSLSVKQSS QLLTNDNEVL YRIYAAEPRI IPQTSLSCLLW NQAAASWLSD SQFCKVIEET </p>
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576	190168	G Protein- Coupled Receptor GPR58	NM_014626	ADYVEACSH MSVYAVYART DNLSSYNEAF FTSGFICISG LCLAVLSHIF CARYSMFAAK LLTHMMAASL GTQILFLASA YASPOLAEES CSAMAAVTHY LYLCQFSWML IQSVNFWYVL VMNDEHTERR YLLFLLSWG LPAFVVILLI VILKGIYHQS MSQIYGLIHG DLCFIPNVYA ALFTAALVPL TCLVVVFVVF IHAYQVKPQW KAYDDVFRGR TNAAEIPLL YLFALISVTW LWGGLHMAYR HFWML VLFVI FNSLQGLYVF MVYFILHNQM CCPMKASYTV EMNGHPGPST AFFTPGSGMP PAGGEISKST QNLIGAMEEV PPDWERASFQ QGSQASPDLK PSPQNGATFP SSGYGQGS LIADEESQEFD DLIFALKTGA GLSVSDNESG QGSQEGGTLT DSQIVELRRI PIADTHL algtatcat ttalggcagg atccatatic atcaaalat ttggcaatct tggcatgata atttcattt cctactitcaa gcagctcac accaaacca actctcat cctctccalg gccatcacg attctctct gggatcaccc atcatgcat atagtatg catatggig gagaactgct ggtaattgg gcttiacatt tgcagatt attatgatt tgcctgag cttagcataa catcatatt tcatcttgc tcagtggcca ttatagatt ttatgatala tttatccat tctttatc caccataata actatccag tcatataaag attgctact ctatgtgtt cggctccagg agcatttgc ttggggcgg tctctcaga ggctatgca galggaalag agggctatga catcttgtt gctgttcca gtctctgcc agtgatgic acaagctat ggggagccac ctgtttatg gcaggttct tcatctcgg gtctatgag gtgggattt acggcaaaat tttagcaga tccagaaac atgctcagc calcataaac ttgcgagaaa atcaaaataa tcaagtgaag aaagacaaaa aagctgocaa aactttagga atagttaga gagtttctt attatgttg ttcttgtt tctcacaat ttatgtgat ccttttga actctcact tctgtatg ttgtttag ccttgacag gtgttgcat ttataacca calgaaatcc gttaaalat ggtttctt atccctgtt tgcgagaca cgaagtaaa ttgtcagg taaatttcc agctatgtt tccataatc tatgttgtt algcaaaaag aaagtgaia g MYSEFAGSIF ITIFGNLAMI ISISYFKQLH TPTNFLILSM AITDFLLGFT IMPYSMIRSV ENCWYFGLTF CKIYYSFDLM LSITSIFHLC SVAIDRFYAI CYPLLYSTKI TIPVKRLLL LCWSVPGAFA FGAVFEAYA DGIEGYDILV ACSSSCPVMF NKLWGTTLFM AGFTPGSMM VGIYGKIFAV SRKHAHAINN LRENQNNQVK KDKKAATLG IVIGVFLCW FPCFTILLD PFLNFSTPVV LFDALTWFGY FNSTCNPLIY GFFYPWFRRRA LKYILLGKIF SSCFHNTILC MQKESE	A	Homo sapiens
577	190168	G Protein- Coupled Receptor GPR58	NP_055441.1	MYSEFAGSIF ITIFGNLAMI ISISYFKQLH TPTNFLILSM AITDFLLGFT IMPYSMIRSV ENCWYFGLTF CKIYYSFDLM LSITSIFHLC SVAIDRFYAI CYPLLYSTKI TIPVKRLLL LCWSVPGAFA FGAVFEAYA DGIEGYDILV ACSSSCPVMF NKLWGTTLFM AGFTPGSMM VGIYGKIFAV SRKHAHAINN LRENQNNQVK KDKKAATLG IVIGVFLCW FPCFTILLD PFLNFSTPVV LFDALTWFGY FNSTCNPLIY GFFYPWFRRRA LKYILLGKIF SSCFHNTILC MQKESE	P	Homo sapiens
578	190170	G Protein- Coupled Receptor GPR57	NM_014627	alggatciaa ctatatic ccgaagaccta tccagtgc caaaattgti aaataagalc ctgtctccc accaaccgct ctittcatgt ccaggigata atgtatcgg ttatgactgg agccaatgti atccactat cgggaacttg gtataaagg ttccatalc gcatitcaaa cagcttact ccccacaaa ctctcagc ctctccalg caaccacgga ctctctcgg gggtttgca ttatgccata cagcalaatg cgatcagtg agagtgcg tctatgggg galggcttti gtaaatcca cacaagctt cagatgagc tccagactgac ctccatttc cactctgtt ccattgcat tgcagattt talgocggti gtiaccccti acattacaca accaaaaga cgaactccac cataaagcaa ctgcggcat ttgcgggc agtctctgt ctitttcti ttgtttatg tctatcigag gccgaggtti ccggtatgca gagctataag atactgtg ctgtctcaa ttctgtcc ctacttcca acaattcig ggggacaata ttgttacia caigtctt tacccctggc tccatcagg ttgttattia tggcaaatc ttatcgtt ccaaacagca tgcctgagc atcagccatg tgcctgaaaa cacaaggggg gcagtgaata aacacctac caagaaaaag gacaggaag cagcgaagac actgggata gtaattggggg ttgtctggc ttgtgttg cctgtttc ttgtgtct gattgacca taccatgact actccactcc calactala ttggatctt tagtggct ccggtactt aacttacti gcaacctct taitcaggc ttuttaalc calgtttica gaaagcattc aagtacatag tgcaggaata aalatttagc tccattcag aaactgcaa ttgttctt gaagcatt aa MDLTYIPEDL SSCPKFVNKI LSSHQPLFSC PGDNVFGYDW SHDYPLFGNL VIMVSISHFK QLHSPTNFLI LSMATTDFLL GFVIMPYSIM RSVESCWYFG	A	Homo sapiens
579	190170	G Protein- Coupled Receptor	NP_055442.1	MDLTYIPEDL SSCPKFVNKI LSSHQPLFSC PGDNVFGYDW SHDYPLFGNL VIMVSISHFK QLHSPTNFLI LSMATTDFLL GFVIMPYSIM RSVESCWYFG	P	Homo sapiens

GPR57

580 190188 G Protein- AB049405 Homo sapiens
Coupled Receptor
LGR6

DGCKFHTSF DMMLRLTSIF HLCSIAIDRF YAVCYPLHYT TKMTNSTIKQ
LLAFCSWVPA LFSFGLVLSE ADVSGMQSYK ILVACNFCA LTFNKFWGTI
LFTTCFFTPG SIMVGIYGI FIVSKQHARV ISHVPEPTKG AVKHLSSKKK
DRKAAKTLGI VMGVFLACWL PCFLAVLIDP YLDYSTPLI LDLLVWLRYF
NSTCNPLIHG FFNPWFQKAF KYIVSGKIFS SHSETANLFP EAH
ggccactggca gggagggcggc atcagctgt cggccgactg cctgagctc gggctgtccg ccgttccggg gggactgggac
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catocacct gaggccctt ccaacctggc cttccggctc aagctgggac tgaagagaaa ccaggctggacc acactggccc
tggctggact tggggggctgg atgcatctga agctcaagg gaaacttggct cttccaggc cttcttcca gggaggttc
ccaaactga ggaacttgg ggtgtccat gcttaccagt gctgttccaa tgggaggtt ggcagcttct tcaaggccct
tgggagctgg gaggctggag acctcaact tgaatggag gaaacttcaa aaaggccct ggggctctct ggcagagaa
caggagaa ctaatggag gaaactggag agctccagct ggaatggag gactcaagg cacacccag tttccaggt
agcccttacc caggccctt caggccctt ggaacttct ttgaaagctg ggggcatccg cgggctgtt ggggcatct
gttggcttcc gttgtctgca atgggactgt gctgtggac gttgttggct gggggctgg cctccctggcc ccgggtcagt
ttgtgtggag tgggagca gggggcaaca cctggactgg catttctt gggcttctga cctcagctga tggcttggac tttgttcat
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cctggggcag gttcggagc ggggtccagg cttggctggca ctggcaggc tggccggcc acggccctg gctcaggtgg
gagaaagc gggctccca cttggctgg ccagggcc accggaggt caggcagc cctgggctt caccgtggcc
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cttggggcc gttgggagct gggccagct gaaagcagct gcttggcaga cggggctctc tacttccg
tggcttct cagcttggc tccatggc gggcttcc tggcagcc gaggccgca agcttctt gctgtgtg
ctggccctg cttggctt caaccacag ctggactgg ttttccacc cacttccgg gttggacttc gggggcttgg
ggccggcaga ggggactcag gggccctcag ctatggctg gggggggggagc tgggagagag cttctgtat tctaccagg
ccctgggagc ctctctgtat gttggactca ttctggagc ttctggagct gggggggccc cggggctgg gaaactggc
ttccctcag tgaacctat cttctggc caggccaggg ccccaaggct ggaagggcagc cattgtgtat agccagggg
gaaacctt ggggaaoccc aaccttcat ggaatgggaaa ctggcttga gggcagaggc atctacgca gcaaggtggag
gcttggag ggggtggggc tttcaggccct ctggctggc cttggcaga caggtgaaa tatccctcc cattcttc tttccctc

581	190188	G Protein-Coupled Receptor LGR6	AAG17168.1	<p>ttccctttcc tctctcccc tcgggaag atggcigtctt claaacaaa lacaacaaa actcagcagt gfgatclata gcaggaaggc ccagttacgt gctccaciga tcaactctt ccttgagca taccacagg gfgcctcttg gcccttgctt cccitggcct tcttcagctt caccitgata ctgggcctt tcttgcat gctgaagct gfggacaga gaccigact ttgtctgct taagggaat gagggaga</p> <p>aagacagiga aggggtgag ggtgaltca</p> <p>MRLEGEGRSA RAGQNLFRAG SARRGAPRDL SMNNLTELQP GLFHHLRFLF</p> <p>ELRLSGNHLH HIPQAFSGL YSLKILMLQN NQLGGIPAEA LWELPSLQSL</p> <p>DLNYNKLQEF PVAIRTLGRL QELGFHNNNI KAPEKAFMG NPLLQTHFY</p> <p>DNPIQVGRS AFQYLPKLHT LSLNGAMDIQ EFPDLKGTTS LEILTLTRAG</p> <p>IRLLPSGMCQ QLPRLRVLEL SHNQIEELPS LHRQCQKLEI GLQHNRIWEI GADTFSQLSS</p> <p>LQALDLSWNA IRSIPEAFS TLHSLVKLDL TDNQLTTLPL AGLGGLMHLK</p> <p>LKGNLALSQA FSKDSFPKLR ILEVPIYQC CPYGMCSFF KASQQWEAED</p> <p>LHLDDEESSK RPLGLLARQA ENHYDQDLDE LQLEMEDSKP HPSVQCSPTP</p> <p>GPFKPCEYLF ESWGIRLA VW AIVLLSVLCN GLVLLTVFAG GPVPLPPVKF</p> <p>VVGAAGANT LTGISCGLLA SVDALTFQGF SEYGARWETG LGCRATGFLA</p> <p>VLGSEASVLL LTLAAVQCSV SVSCVRAYGK SPSLGSVRAG VLGCLALAGL</p> <p>AAALPLASVG EYGASPLCLP YAPPEGQPAALGFTVALVMM NSFCLVVG</p> <p>AYKLYCDLP RGDFAVWDC AMVRHVAWLI FADGLLYCPV AFLSFASMLG</p> <p>LFPVTPEAVK SVLLVVLPL ACLNPLLYLL FNPFRDLDL RLRPRAGDSG</p> <p>PLAYAAAGEL EKSSCDSTQA LVAFSDVDLI LEASEAGRP GLETYGFPSV</p> <p>TLISCCQPGA PRLEGSHCPE PEGNHFGNPQ PSMDGELLRL AEGSTPAGGG</p> <p>LSGGGFQPS GLALLHTY</p>	P	Homo sapiens
582	190414	G Protein-coupled Receptor GPR101	AF411115	<p>algaagttcca cctgacacaa cagcacggcg gagagtaaca gcagccacac gfgcagcccc cctccaaaa tgcctcatag cctggcccaac ggccalcacc gctcaaccgt gctggtaic ttccggcg cctcttgtt ggcgaacata gfgctggcgc</p> <p>tagtgtgca gcgcagggcg cagctgtctgc aggtgaccaa cggtttalc tttaacctc tgcaccca cctgctgacg atttcctcg tggcccccg gggtgtggcc acctgtgtc cctctctgc gcccctcaac agccactct gcacggccct</p> <p>ggftagccct accaccgt tgccttcgc cagctgaac accattgtcg tgggtgtcag ggaicgclac ttgccaatca tccacctct cctclacccg tccagatga cccagggcg cgggttaacct cctctatg gcaccttgat tggggccalc ctgcagagca</p> <p>cctccact ctacggctgg ggccaggcctg ccttgatga gcgcacatgct cctgctcca tgaicgggg ggccaggcccc agctacacia ttctcagct gggtctctc atgctalc cactgatgt catgatggc tgcactccg tgggtgtctg tgcagccccg</p> <p>agccagcaltg cctgctgta caatgtcaag agtacacagct tggtaagtcg agtcaaggac tgggtgtgta algaaggatga agtaaggatga agtaaggatga agtaaggatga agtaaggatga agtaaggatga agtaaggatga</p> <p>agggcagaaat ggaaagccaa gacggccagcc tgaaggccaa ggaaaggaaagc acgggggacaa gttgagatga gttgagatga aggggcagcg agtaaggatga agtaaggatga agtaaggatga agtaaggatga agtaaggatga agtaaggatga</p> <p>agtaaggatga agtaaggatga agtaaggatga agtaaggatga agtaaggatga agtaaggatga agtaaggatga agtaaggatga agtaaggatga agtaaggatga</p> <p>agtttggta agtaaggatga agtaaggatga agtaaggatga agtaaggatga agtaaggatga agtaaggatga agtaaggatga agtaaggatga agtaaggatga</p> <p>cgttaacagca acagcaacc tctctggcc aggtgtgac agtgcacagc tgaataag tcttcaatca tcaatgtc ctatgtgta tccctggggc cctactgt tttagcagct ctggccgtgt gggtgtgctat gtaaacccag gtaacccagt gggtgtgacat</p> <p>calaalcac tggctttct tctgtcagct ctgcatcac cctatgtct atggctatct gcacagacc ataaagaggg aaatccagga catgtctgaag aggtttctt gcaaggaaaa gccccgaaa agtaaggatga acccagacct gccccgaaa agtaaggatga</p> <p>cigaaggcaa gattgtccct tctacgatt ctgtacttt tcttga</p>	A	Homo sapiens

583	190414	G Protein-coupled Receptor GPR101	CAC33098.1	MTSTCTNSTR ESNSSHTCMP LSKMPISLAH GIIRSTVL VI FLAASFVGNL VLALVLQRKP P QLLQVTNRFI FNLLVTDLLQ ISL VAPWVVA TSVPLFWPLN SHECTALVSL THLFAFASVN TIVL VSDRY LSIHPLSY SKMTQRRGYL LLYGTWIVAI LQSTPPLYGW QQAAFDERNA LCSMIWGASP SYTILSVVSF IVPLIVMIA CYSVVFCAR RQHALLYNVK RHSLEVRVKD CVENEDEEGA EKKEEFQDES EFRRQHEGEV KAKEGRMEAK DGLSKAKEGS TGTSESSVEA RGSEEVRESS TVASDGSMEG KEGSTKVEEN SMKADKGRTE VNQCSIDLGE DGMFEGEDDI NFSEDDVEAV NPESLPPSR RNSNSNPPLP RCYQCKAAKV IFIHFSYVL SLGPPYCFILAV LAVWVDVETQ VPQWVITIII WLFLLQCCIH PYVYGYMHKT IKKEIQDMLK KFFCKEPPK EDSDPDLPGT EGGTEGKIVP SYDSAIFP	Homo sapiens
584	190418	Inflammation-Related G Protein-Coupled Receptor EX33	NM_020370	taactgtcca cagaaagga cgtctcttg ggtgagtga acttctcca ttatagaaag aatgaaggc tgaagaatic agcctctatc A atgiggaaac gctctgacgc caactctcc tgcctacatg agctctgctt gggctatcgt taigtgtcag ttatgtgggg gggtgggttg gctgtgacag gcaccgtggg caatgtgtc accctacttg ccttggccat ccagcccaag cctgtatcc gattcaacct gctcalagcc aactcacaac tggctgact cctctactgc agctctctc agcctctc tgggatacc tacttccacc tgcatggcg caocgggtgc acctctgca gggatlttg gctctctt ttgctcca attctgtc catcttgacc ctctgctca tcgcactggg acgctacct ctaattgcc acctaaagt ttitcccaa gtttctatg ccaaggggat agtctgggca ctgtgtgaca cctgggtgtt gggcgtggcc agcttctc cctctggcc tattatc cgttactg tagtctgac ctgacgtt gaccgcatcc gaggccggcc ttaccacc alctcatgg gcatctact tgtcttggg ctacgagtg tggcactt ctatgtctc atccaccgcc aggtcaaacg agcagcacag gcactggacc aatacaagt ggcacagga agcatccact ccaacctgt ggccaggact gatgaggoca tgcctgtctg ttccaggag ctggacagca ggtttagcalt aggaaggacc agtgggggga tttcatctga gccatcagt gctgccaca ccagacctt ggaaggggac tcatcagaag tgggagacca gatcaacagc aagagagcta agcagatggc agagaaagc cctccagaag catctgcca agocacagca attaaaggag ccagaaagagc tcoggaltt tcatcggaat ttgggaaggt gactcgaatg tgtttgtg ttttctctg ctgttctg agclacatcc ccttctgt gctcaacatt ctggatgcca ggttccaggc tcccggttg gtccatctg ttgtgcca cctacatgg ctcaatggt gcatcaacc tgtgtctat gcagccatga accgcaatt ccgccaagca taaggctcca tttaaag agggcccgccg agtttccata ggctccatta gaactgtgac octagtcacc agaattcagg acgtctct ctaggacca agtggccagg taataggaga ataggtagaa taacacatgt gggcatttc acaacaatct ctccagacc tcccaatca agtcttcca tcatgtatc aatgtttcag ccttagactg cccaaggagt attaataat attaatgt gaattctgt ctttaaaaa aaaaaaata aaaaaagaaa aaaaaaaa aaaaaaaa aaaaa	Homo sapiens
585	190418	Inflammation-Related G Protein-Coupled Receptor EX33	NP_065103.1	MWNSSDANFS CYHESVLGYR YVAVSWGUVV AVTGTGUVNL TLLALAIQPK P LRTRFNLLIA NLTLADLLYC TLLQPFVSVD T YLHLHWRTGA TFCRVFGLL FASNSVSILT LCLIALGRYL LIAHPKLPQ VFSAGGIVLA LVSTWVVGVA SFAPLWPIYI LVPVCTCSF DRIRGRPYT ILMGIYFVLG LSSVGIFYCL IHRQVKRAAQ ALDQYKLRQA SIHSHVART DEAMPGRFQE LDSRLASGGP SEGISSEPV AATTQTLEGD SSEVGQDQNS KRAKQMAEKS PPEASAKAQP IKGARRAPDS SSEFGKVTRM CFAVFLCFAL SYPFLLLNI LDARVQAPRV VHMLAANLTW LNGCINPVLY AAMNRQFRQA YGSILKRGPR SFHRLH ctttgttcca gagtaaac agttttct cttccacag caaalatct gacagtgatc atctctcc agctgtggc aagaagacag A aagctctct acaactatct ctggcactc gctgtgccc acatctgtt cctttttt atagtgttg tggacttct gttggagat ttcatctga acalgcagt gctcaggct cccgacaaga tcatagaagt gctggaaatc tcatcatcc acactccat atggattact	Homo sapiens
586	190419	G Protein-Coupled Receptor Ls190419	AJ303165		Homo sapiens

587	190419	G Protein- Coupled Receptor Ls190419	CAC33085.1	LCFRAKPVFL LSTANILTVI ILSQLVARRQ KSSYNYLLAL AAADILVLFF IVFVDFLLED FILNMQMPQV PDKIEVLEF SSIHTSIWIT VPLTIDRYIA VCHPLKYHTV SYPARTRKVI VSVYITCFLT SIPYYWWPNI WTEDYISTSV HHVLWIHCF TVYL VPCSF FILNSIIVYK LRRKSNFRLR GYSTGKTTAL LFTITSIFAT LWAPRIIMIL YHLYGAPIQN RWLVHIMSDI ANMLALLNTA INFFLYCFIS KRFR	aagttctcta agtttgaagc gtacagcttca accaacaazaa ttatggcta ttclacatc aaaaaacagg aaattaaat ttatttga atgtaatgca gcatgtatga aagacttaac cagtggttta aaactcaact ttcaazagaaz agtatgtatt gtctccgttt tcatataaac ctagagagat gtaatacagta agcaagagagg aaaaaggagaa atlcacaaag taacttttgg tgcctgtttc ttuttaacc agcatggaga gaaaattttat gtcttgcaaa ccatccatct ccgtatcaga aatgggaacca aatggcacct tcaagcaataa caacagcagg aacgtcacaa ttgaanaactt caagagagaa ttittccaa ttgtatatct gataatttt tctggggag tctggggaaa tgggtgttcc alatatgttt tctgtcagcc ttataagaa ttccatctg tgaacgtttt cagctaaat cgggcaattt cagatctctt gttcataagc acgttccct tcaagggtcga ctattattt agaggtctcca attggatatt tggagaacctg gccgtcagga ttatgttia ttcttgtat gtcaacatgt acagcagttat ttatttctg accgtctgga gttgtgtgag ttcttgga alggttacc cccttgggtt tctgtcagtc accagcatca gggagtgtcctg gtaacctgtt gggatcatat ggaacctt calggcttcc tcaataatgc tcttgggacag tggctctgag cagaacggca gttcacatc algcttagag ctgaatctt alaaatgtc taagctgcag accatgaact atatgtcct gggtgtgggg tgcctgtcgc catcttcc actcagcatc tghtatctg tgaatctg ggttctgta aaggtggaggg tccagaatc ggggctgcgg gtttlcaca ggaaggcact gaacaccatc atcatcctt tgaatctt ctctgtgt ttctgtcct atcacacat gaaggaccgtc cactgacga catggaaagt ggggttatgc aagaacagac tgcataaagc ttgggtalc acactgtgct tggcagcagc caatggctgc ttcaatctc tgcctatta ctgtcttga ttgggtatga ttgaacctac ttcaaat ttatcagtg tatttcagt ctcagaanaag gccatocaca gaaggcaag acaaggtgtg ttccctgt tagtgtgtgg ttgaagaagg aaacaagagt alaaagggtc cttagatgag accgttctt gtaacctgt gtccatctc attacatc atgttccaaa tgaatttga ttatcagc ttccaacaaa tgttgattct taatattag ttgaccattia ctgttga ttgaacctac ttcaaat ttatcagtg tatttcagt tgttgagct taatgaaggga tacaaggagga aaaaacctta cttagagctt gttgggtcga alatacagat gggaanaat gcaaggcaca ttggatctta ctittctca galatgaac cagatctcgt gccatcagg ctcttaaat tcttcaaaag agccacaact tcccagctt ctccagctcc cctgtctctt tcaatccctt gagaatagc aactaacagac gctactggaa gccocagagc agaaaaggag cacatctcaa gattcagga aagactaact gtgaanaaga aggtctgtct alaaacaagc agcatcaagt ccaaagttaa gacatgtaga gaanaaggggg agaaaggattg gaagcaanaaga gaactgggcaa taagttagggg aaggaagaat ttcatcttgc atttgggagag aggttcaac acactgaagg caacctatt tcatctgtt ctctctgcc aggtgtatag gaaggacagg aaaagttagga ggaaggatctg gggcatggcc ctagggaalg aagaatgtt gtatagaalg gaagggggtat catcaaggac atgtatctca aattttctt gtagtcagg ttgttgacc ttgtcaggt tctcttcc attaatct tgggatggaa gccaaaaata aaagaggtgc ctctgaagat taggttgaag cactcaaggg aagatgggag tagaggggcaa alagcaaaag ttgtgtcact cctgaatc tattaacatt tccgcagaag atgaataggg agtgtctgc ttcccttgg agtatgtga gaanaacact agtatgtgtg agaggttctt tctgtccat tgaacaaagg ctgaaggatc laccaatc latcaccalg accattgtac tgaacaaat tgaatgcagt	P	Homo sapiens
588	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NM_020377	aagttctcta agtttgaagc gtacagcttca accaacaazaa ttatggcta ttclacatc aaaaaacagg aaattaaat ttatttga atgtaatgca gcatgtatga aagacttaac cagtggttta aaactcaact ttcaazagaaz agtatgtatt gtctccgttt tcatataaac ctagagagat gtaatacagta agcaagagagg aaaaaggagaa atlcacaaag taacttttgg tgcctgtttc ttuttaacc agcatggaga gaaaattttat gtcttgcaaa ccatccatct ccgtatcaga aatgggaacca aatggcacct tcaagcaataa caacagcagg aacgtcacaa ttgaanaactt caagagagaa ttittccaa ttgtatatct gataatttt tctggggag tctggggaaa tgggtgttcc alatatgttt tctgtcagcc ttataagaa ttccatctg tgaacgtttt cagctaaat cgggcaattt cagatctctt gttcataagc acgttccct tcaagggtcga ctattattt agaggtctcca attggatatt tggagaacctg gccgtcagga ttatgttia ttcttgtat gtcaacatgt acagcagttat ttatttctg accgtctgga gttgtgtgag ttcttgga alggttacc cccttgggtt tctgtcagtc accagcatca gggagtgtcctg gtaacctgtt gggatcatat ggaacctt calggcttcc tcaataatgc tcttgggacag tggctctgag cagaacggca gttcacatc algcttagag ctgaatctt alaaatgtc taagctgcag accatgaact atatgtcct gggtgtgggg tgcctgtcgc catcttcc actcagcatc tghtatctg tgaatctg ggttctgta aaggtggaggg tccagaatc ggggctgcgg gtttlcaca ggaaggcact gaacaccatc atcatcctt tgaatctt ctctgtgt ttctgtcct atcacacat gaaggaccgtc cactgacga catggaaagt ggggttatgc aagaacagac tgcataaagc ttgggtalc acactgtgct tggcagcagc caatggctgc ttcaatctc tgcctatta ctgtcttga ttgggtatga ttgaacctac ttcaaat ttatcagtg tatttcagt ctcagaanaag gccatocaca gaaggcaag acaaggtgtg ttccctgt tagtgtgtgg ttgaagaagg aaacaagagt alaaagggtc cttagatgag accgttctt gtaacctgt gtccatctc attacatc atgttccaaa tgaatttga ttatcagc ttccaacaaa tgttgattct taatattag ttgaccattia ctgttga ttgaacctac ttcaaat ttatcagtg tatttcagt tgttgagct taatgaaggga tacaaggagga aaaaacctta cttagagctt gttgggtcga alatacagat gggaanaat gcaaggcaca ttggatctta ctittctca galatgaac cagatctcgt gccatcagg ctcttaaat tcttcaaaag agccacaact tcccagctt ctccagctcc cctgtctctt tcaatccctt gagaatagc aactaacagac gctactggaa gccocagagc agaaaaggag cacatctcaa gattcagga aagactaact gtgaanaaga aggtctgtct alaaacaagc agcatcaagt ccaaagttaa gacatgtaga gaanaaggggg agaaaggattg gaagcaanaaga gaactgggcaa taagttagggg aaggaagaat ttcatcttgc atttgggagag aggttcaac acactgaagg caacctatt tcatctgtt ctctctgcc aggtgtatag gaaggacagg aaaagttagga ggaaggatctg gggcatggcc ctagggaalg aagaatgtt gtatagaalg gaagggggtat catcaaggac atgtatctca aattttctt gtagtcagg ttgttgacc ttgtcaggt tctcttcc attaatct tgggatggaa gccaaaaata aaagaggtgc ctctgaagat taggttgaag cactcaaggg aagatgggag tagaggggcaa alagcaaaag ttgtgtcact cctgaatc tattaacatt tccgcagaag atgaataggg agtgtctgc ttcccttgg agtatgtga gaanaacact agtatgtgtg agaggttctt tctgtccat tgaacaaagg ctgaaggatc laccaatc latcaccalg accattgtac tgaacaaat tgaatgcagt	A	Homo sapiens	

589	190427	Cysteiny Leukotriene CYSLT2 Receptor	NP_065110.1	<p>ctccctgcag ggcagattat gccaggcact ttacattgt tgaaccatt tgacattac accaaagctc tgaattccat ttacagctg aagaataaga agcttagaga aatlaagaag ctgtttiaa ttacacagc tgaagaagc ttataaatac tctgtgcaga agtgttggct gggtgcttc cocaccacia ccttgtataa ctccaggaa gattgttga aagcttgaat aaaagctgic ctctciacc aattctccc cctctcac tctcaaga aaacaaaaag ttctctca gattgtga cicalaglac agtaaaagg gtaggtgata tggcattctg aaagtagga gggactaagt cagtgcctat actaaac MERKFMSLQP SISVSEMEPN GTFNNNSRN CTIENFKREF FPIVYLIFF WGVLGNGLSI P YVFLQPYKKS TSVNVFMLNL AISDLLFIST LPFRADYYLR GSNWIFGDLA CRIMSYSLYV NMYSSYFLT VLSVVRFLAM VHPFRLHVT SRSAWILCG IIVILMASS IMLLDSGSEQ NGSVTSCLL NLYKIAKLQT MNYIALVGC LLPFTLSIC YLLIRVLLK VEVPESGLRV SHRKALTTII ITLIFFLCF LPYHTLRTVH LTTWKVGLCK DRLHKALVIT LALAAANACF NPLLYYFAGE NFKDRLKSAL RKGHPQKAKT KCVFPVSVMW RKETRV A cctgtgtcc acgtgtcga caaatctaa ctctcaagg actccaaaa ccagagacac caggagcctg aatgggaac gattctgca gctacagla tggggattac agcgacct ctggaccgcc tgggacgc cggatggcg cctgtcggc catgacccg ctgcgcggg cccgcctcc actgtatgcc gccattctc tgggtggggg gccgggcaat gccatgggtg cctgggtggc tgggaaggcg gccggccgga ggggtgggtg cactgttgc ctccactgg ccgtggcgga ttgtgtg tgtttgtc tggccatct ggcatgtccc attgccg ggggacag cctgtatgg gcatgtgggt gtcggggcgt ggcctccalc atctgtcga ccatgtatgc caggtctc cctgtggcag ctctcagtc cgaacctcgt ttctgtgctc tggggcctgc ctgtgtgtct acgtgtcagc ggggtgtggc ggtgtcaggtg gccgtggggc cagcctggac actggcctg ctgtcacog tggcctcgc catctaccg cggctgcac agtagcact cccagccgg ctgcaggtg tgggtgacta cggcggtctc tccagcacc gaaatgggt gactgcac cgtttcti tgggtctct gggggcccg ggtggcggtg ccagctgcca cagtgcctc ctgtgtggg cagcccgac ctgcggcg cgggacag ccattgtgt ggggtttt gtctgtgg caocctaca cctgtgggg ctgtgtcga ctgtggcg cccgaactc gcatctcgt ccaggccct gggggtgaa cccctacg tgggctgtc cctgtcac agctgtcac atccatgt ctctgtat ttggggggg ctcaactcg ccgtgtcag cagctgtct gtactgtggc ctgtggggg tccagggcc aggcagaaag tgtggacag aagaaloca ccagccalga cctgtgtcg gagatggg tgaagcgtg agagacatg tgggtgtga tctcttalc tcatteaca agctgtgt caggcalagc tggatccagg agctcaatga tgtctcat ttatcttc ctatcaca cagatcca tcatgactt gctatgtga agcctttt aggcactaga galatagcag tgaocaaaac agacaaaat cctgccc MGNDVSVEY GDYSDLSRP VDCLDGACLA IDPLRVAPLP LYAIFLVGV P PGNAMVAWVA GKVARRRVA TWLLHLA VAD LLCLSLPIL AVPIARGGHW VQVACGAAWT LALLTVPSA IYRLHQEHF PARLQCVVDY GGSSTENAV TAIRFLFGL GPLVAVASCH SALLCWAARR CRPLGTAVV GFFVCWAPYH LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPML FLYFGRAQLR RSLPAACHWA LRESQQDES VSKKSTSHD LVSEMEV A algttggcc ctgtgtct gggcctcagc ctgtggctc tctgcac ccaggcggg gccocattgt gccgtcaca gcaacttag algaaggcg actatgtc tggggggctg ttcccttgg gcgaaggcga gtaggttggc ctccagcc ggacagggc cagcagcct ggtgcaca ggtacaggg tgggacggc tgggtgggg tgggtggc caggtgtgg gtgtctcga gcttggggcg aggtggocat ctgggttct ggttggccc aggttctct caaacggct gcttggga ctggccalga aatggcgt gtaggagac aacaacaagt cgtatctgt gccggggcgt cgtgtggct acgacctt tgalacgtc tgggagcctg tgggtggcat gaagccagc ctatgttcc tggccaaagg aggcagccgc gacatggcg</p>	Homo sapiens
590	190437	G Protein- Coupled Receptor C5L2	NM_018485	<p>ctgtgtcc acgtgtcga caaatctaa ctctcaagg actccaaaa ccagagacac caggagcctg aatgggaac gattctgca gctacagla tggggattac agcgacct ctggaccgcc tgggacgc cggatggcg cctgtcggc catgacccg ctgcgcggg cccgcctcc actgtatgcc gccattctc tgggtggggg gccgggcaat gccatgggtg cctgggtggc tgggaaggcg gccggccgga ggggtgggtg cactgttgc ctccactgg ccgtggcgga ttgtgtg tgtttgtc tggccatct ggcatgtccc attgccg ggggacag cctgtatgg gcatgtgggt gtcggggcgt ggcctccalc atctgtcga ccatgtatgc caggtctc cctgtggcag ctctcagtc cgaacctcgt ttctgtgctc tggggcctgc ctgtgtgtct acgtgtcagc ggggtgtggc ggtgtcaggtg gccgtggggc cagcctggac actggcctg ctgtcacog tggcctcgc catctaccg cggctgcac agtagcact cccagccgg ctgcaggtg tgggtgacta cggcggtctc tccagcacc gaaatgggt gactgcac cgtttcti tgggtctct gggggcccg ggtggcggtg ccagctgcca cagtgcctc ctgtgtggg cagcccgac ctgcggcg cgggacag ccattgtgt ggggtttt gtctgtgg caocctaca cctgtgggg ctgtgtcga ctgtggcg cccgaactc gcatctcgt ccaggccct gggggtgaa cccctacg tgggctgtc cctgtcac agctgtcac atccatgt ctctgtat ttggggggg ctcaactcg ccgtgtcag cagctgtct gtactgtggc ctgtggggg tccagggcc aggcagaaag tgtggacag aagaaloca ccagccalga cctgtgtcg gagatggg tgaagcgtg agagacatg tgggtgtga tctcttalc tcatteaca agctgtgt caggcalagc tggatccagg agctcaatga tgtctcat ttatcttc ctatcaca cagatcca tcatgactt gctatgtga agcctttt aggcactaga galatagcag tgaocaaaac agacaaaat cctgccc MGNDVSVEY GDYSDLSRP VDCLDGACLA IDPLRVAPLP LYAIFLVGV P PGNAMVAWVA GKVARRRVA TWLLHLA VAD LLCLSLPIL AVPIARGGHW VQVACGAAWT LALLTVPSA IYRLHQEHF PARLQCVVDY GGSSTENAV TAIRFLFGL GPLVAVASCH SALLCWAARR CRPLGTAVV GFFVCWAPYH LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPML FLYFGRAQLR RSLPAACHWA LRESQQDES VSKKSTSHD LVSEMEV A algttggcc ctgtgtct gggcctcagc ctgtggctc tctgcac ccaggcggg gccocattgt gccgtcaca gcaacttag algaaggcg actatgtc tggggggctg ttcccttgg gcgaaggcga gtaggttggc ctccagcc ggacagggc cagcagcct ggtgcaca ggtacaggg tgggacggc tgggtgggg tgggtggc caggtgtgg gtgtctcga gcttggggcg aggtggocat ctgggttct ggttggccc aggttctct caaacggct gcttggga ctggccalga aatggcgt gtaggagac aacaacaagt cgtatctgt gccggggcgt cgtgtggct acgacctt tgalacgtc tgggagcctg tgggtggcat gaagccagc ctatgttcc tggccaaagg aggcagccgc gacatggcg</p>	Homo sapiens
591	190437	G Protein- Coupled Receptor C5L2	NP_060955.1	<p>ctgtgtcc acgtgtcga caaatctaa ctctcaagg actccaaaa ccagagacac caggagcctg aatgggaac gattctgca gctacagla tggggattac agcgacct ctggaccgcc tgggacgc cggatggcg cctgtcggc catgacccg ctgcgcggg cccgcctcc actgtatgcc gccattctc tgggtggggg gccgggcaat gccatgggtg cctgggtggc tgggaaggcg gccggccgga ggggtgggtg cactgttgc ctccactgg ccgtggcgga ttgtgtg tgtttgtc tggccatct ggcatgtccc attgccg ggggacag cctgtatgg gcatgtgggt gtcggggcgt ggcctccalc atctgtcga ccatgtatgc caggtctc cctgtggcag ctctcagtc cgaacctcgt ttctgtgctc tggggcctgc ctgtgtgtct acgtgtcagc ggggtgtggc ggtgtcaggtg gccgtggggc cagcctggac actggcctg ctgtcacog tggcctcgc catctaccg cggctgcac agtagcact cccagccgg ctgcaggtg tgggtgacta cggcggtctc tccagcacc gaaatgggt gactgcac cgtttcti tgggtctct gggggcccg ggtggcggtg ccagctgcca cagtgcctc ctgtgtggg cagcccgac ctgcggcg cgggacag ccattgtgt ggggtttt gtctgtgg caocctaca cctgtgggg ctgtgtcga ctgtggcg cccgaactc gcatctcgt ccaggccct gggggtgaa cccctacg tgggctgtc cctgtcac agctgtcac atccatgt ctctgtat ttggggggg ctcaactcg ccgtgtcag cagctgtct gtactgtggc ctgtggggg tccagggcc aggcagaaag tgtggacag aagaaloca ccagccalga cctgtgtcg gagatggg tgaagcgtg agagacatg tgggtgtga tctcttalc tcatteaca agctgtgt caggcalagc tggatccagg agctcaatga tgtctcat ttatcttc ctatcaca cagatcca tcatgactt gctatgtga agcctttt aggcactaga galatagcag tgaocaaaac agacaaaat cctgccc MGNDVSVEY GDYSDLSRP VDCLDGACLA IDPLRVAPLP LYAIFLVGV P PGNAMVAWVA GKVARRRVA TWLLHLA VAD LLCLSLPIL AVPIARGGHW VQVACGAAWT LALLTVPSA IYRLHQEHF PARLQCVVDY GGSSTENAV TAIRFLFGL GPLVAVASCH SALLCWAARR CRPLGTAVV GFFVCWAPYH LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPML FLYFGRAQLR RSLPAACHWA LRESQQDES VSKKSTSHD LVSEMEV A algttggcc ctgtgtct gggcctcagc ctgtggctc tctgcac ccaggcggg gccocattgt gccgtcaca gcaacttag algaaggcg actatgtc tggggggctg ttcccttgg gcgaaggcga gtaggttggc ctccagcc ggacagggc cagcagcct ggtgcaca ggtacaggg tgggacggc tgggtgggg tgggtggc caggtgtgg gtgtctcga gcttggggcg aggtggocat ctgggttct ggttggccc aggttctct caaacggct gcttggga ctggccalga aatggcgt gtaggagac aacaacaagt cgtatctgt gccggggcgt cgtgtggct acgacctt tgalacgtc tgggagcctg tgggtggcat gaagccagc ctatgttcc tggccaaagg aggcagccgc gacatggcg</p>	Homo sapiens
592	190438	G Protein- Coupled Receptor Ls190438	LG94114	<p>ctgtgtcc acgtgtcga caaatctaa ctctcaagg actccaaaa ccagagacac caggagcctg aatgggaac gattctgca gctacagla tggggattac agcgacct ctggaccgcc tgggacgc cggatggcg cctgtcggc catgacccg ctgcgcggg cccgcctcc actgtatgcc gccattctc tgggtggggg gccgggcaat gccatgggtg cctgggtggc tgggaaggcg gccggccgga ggggtgggtg cactgttgc ctccactgg ccgtggcgga ttgtgtg tgtttgtc tggccatct ggcatgtccc attgccg ggggacag cctgtatgg gcatgtgggt gtcggggcgt ggcctccalc atctgtcga ccatgtatgc caggtctc cctgtggcag ctctcagtc cgaacctcgt ttctgtgctc tggggcctgc ctgtgtgtct acgtgtcagc ggggtgtggc ggtgtcaggtg gccgtggggc cagcctggac actggcctg ctgtcacog tggcctcgc catctaccg cggctgcac agtagcact cccagccgg ctgcaggtg tgggtgacta cggcggtctc tccagcacc gaaatgggt gactgcac cgtttcti tgggtctct gggggcccg ggtggcggtg ccagctgcca cagtgcctc ctgtgtggg cagcccgac ctgcggcg cgggacag ccattgtgt ggggtttt gtctgtgg caocctaca cctgtgggg ctgtgtcga ctgtggcg cccgaactc gcatctcgt ccaggccct gggggtgaa cccctacg tgggctgtc cctgtcac agctgtcac atccatgt ctctgtat ttggggggg ctcaactcg ccgtgtcag cagctgtct gtactgtggc ctgtggggg tccagggcc aggcagaaag tgtggacag aagaaloca ccagccalga cctgtgtcg gagatggg tgaagcgtg agagacatg tgggtgtga tctcttalc tcatteaca agctgtgt caggcalagc tggatccagg agctcaatga tgtctcat ttatcttc ctatcaca cagatcca tcatgactt gctatgtga agcctttt aggcactaga galatagcag tgaocaaaac agacaaaat cctgccc MGNDVSVEY GDYSDLSRP VDCLDGACLA IDPLRVAPLP LYAIFLVGV P PGNAMVAWVA GKVARRRVA TWLLHLA VAD LLCLSLPIL AVPIARGGHW VQVACGAAWT LALLTVPSA IYRLHQEHF PARLQCVVDY GGSSTENAV TAIRFLFGL GPLVAVASCH SALLCWAARR CRPLGTAVV GFFVCWAPYH LLGLVLTVA PNSALLARAL RAEPLIVGLA LAHSLNPML FLYFGRAQLR RSLPAACHWA LRESQQDES VSKKSTSHD LVSEMEV A algttggcc ctgtgtct gggcctcagc ctgtggctc tctgcac ccaggcggg gccocattgt gccgtcaca gcaacttag algaaggcg actatgtc tggggggctg ttcccttgg gcgaaggcga gtaggttggc ctccagcc ggacagggc cagcagcct ggtgcaca ggtacaggg tgggacggc tgggtgggg tgggtggc caggtgtgg gtgtctcga gcttggggcg aggtggocat ctgggttct ggttggccc aggttctct caaacggct gcttggga ctggccalga aatggcgt gtaggagac aacaacaagt cgtatctgt gccggggcgt cgtgtggct acgacctt tgalacgtc tgggagcctg tgggtggcat gaagccagc ctatgttcc tggccaaagg aggcagccgc gacatggcg</p>	Homo sapiens

NSDOCID: RWO 02061087A2 1

599	190599	G Protein- Coupled Receptor GPCR5B	NP_057319.1	<p>atciacagaca tggtaactgct tgggtgacacc ctaggggctgg ccctctcac tctggcgcggc aagttcaaga ggtgggaaagct gaaaggggcc ttctctctca tcaagacctt cctctctgg tctatcggg tggccctggat gaccatggat cctctgggca atgtaagct gcagcagggg gtagcctggg acgacccacc ctggggccac acgtcggcgg ctagggggcgg ggtctcggc atcttccacg ccatccctga gatacagc accctctgc cagccctgca ggaagaaacag cccaactact tctgacacgct gcagcccccgg atgcgggaga cggcctctga ggaagagcggc cagctcggcc gggccctatata ggaagaaacag gctcttccca tggatgaaaca caatgcaact ctcggaaacag caggtatctc caacggcagc ttgggaaaaa gacccagggc cagctggggg aaaaagaccca gctcctcgtt tagaagcaac gtagatcagc caactgagat ggcggcggcgg ctaacggcgg ggaacatccc aactgctccg ccaagtcaca cagggaagaca ccttgggga aagactttaa gttccagaga atcagaatit ctttaccga ttggcctccc tggcctggc ttttgggg gagaatctgg taacagttgc cgaacacggc cgtctcacag ccaaggacat tggaaatctt agccaaaggggg atttgggta aatggaaca ctgacgaact gaaagactaa caaccagcgg ccggccctcc cctggccacac acacagagacac gtaataccag accaactca atcccggca actaaagcaa agctaatgg aatagatatt aggtctacag gtaaaatgggg ctgggaagac tgtttacc tctgggggga gaaacagacc aatitcacag ctggggggcc agactggggt tgggtggggg tggggggctc ccactctat caactctcc cagcaagcgg tggaccccaag gtagccctt ggaagatgacc gttgcgttga ggacaatgg ggaacttggc accggctgc cgggtgggtt gcaattica gggggggcag gaaagttaag gaaagtgggg gtgggattcc aaggtgaggg ccaactgaat cgtgggggga gctttatagc cagttatggg ggaaggacccc tggcagggc caaaagaaag gcccctgggg tgaagagg accatcacat ttggaaggg atcaaacact gttctctta tggggcctct gctctaaagt ctatggggg aacacagggc ccggcccttc ccttggggga ccataagaa atctgggtt gggggcagcag tccctcttc ccttgatcat ctggccctgt tctacact accgggggtat ctccaaatc tctccaat ttatccct atitcattca agagctccaa tggggctcc agctgaaagc cctccgggga ggcagggggg aaggcagggca ccacggcagg ttctccgga tgaatgaccc tagcagggtc taggggggtc ccactagat gcaagatga cctctcgg cctcacagc agtgacacct cggggcttt ccgttgctat ggggaaaat cctggagga atggatcaca tgaagggttc ttgtgctt tggagggggt gggggatatt ttgtttgt ttttcagc gttocatgaa aacagccct ttcaagcc attgtctgc tcatgggtc catctgctt gagaagga ttccttgt attagcatt tgaacatct cggccattca aagcccccag gttctcga ctgttggcc agcataact clagataga ttcaaggcag agtttaacc tgaaggcag gaagtataa atgaggggg gttctcgg agatactta atcacatct tgtttttt alaaactac ccataagct ttaacctta aagaaaaatg aaaaaggta gtttgggg gccgggggag gactgaccg ttcataagcc agtagctg agctgagat gttcataa acctttgg atttctcaa aaaaaaaa aaaaaaaa MFVASERKMR AHQVLTFLL FVITSVASEN ASTSRGGGLD LLPQYVSLCD LDAIWGIVVE AVAGAGALIT LLLMLLLVR LPFIKEKEKK SPVGLHFLFL LGTGLGLT FAFIQDET ICSVRRFLWG VLFALCFSCSL LSQAWVRRL VRHGTGPAGW QLVGLALCLM LVQVIAVEW LVLTVLRDTR PACAYEPMDF VMALIYDMVL LVVTLGLALF TLCGKFKRWK LNGAFLITA FLSVLIWVAV MTMYLFGNVK LQQGDWNDP TLAITLAASG WVFVIFHAIP EIHCTLLPAL QENTPNYFDT SQPRMRETAF EEDVOLPRAY MENKAFSMDE HNAALRTAGF PNGSLGKRPS GSLGKRPSAP FRSNVYQPTA MAVVLNGGTI PTAPPSHTGR HLW gtggcctga ggtgggga gggccggcc ctagcgtccg gtagcgaagc cagggacgg gctccggag gcagggtcgg ctggagga cggctcgg ttgctctac acttggcaa atgtctcga gttactac atagcatatt ggtatcaa aatgaaatgc aaggaccaa aataacata atlgaaagca gtaaaagga aataaata gaaatcatc agtcaaggaa gacccactgg agaggacaga aatgaagca gttttatc atgtgatt cagcaggct tctgaaat taactaaaa latgactgt cttcttca agaaactgt tttagtac cagttagc aaacaaacca gcccctagac gtaataic tgtatctt gatacact gggaaaaat tataaatat ccttacata ggaatgaga gaaaaaac ctgcaaaa ttatggat attttgcat ttactaga ttcgtgac</p>	P	Homo sapiens
600	190602	G Protein- Coupled Receptor GPCR150	NM_014373	<p>gtggcctga ggtgggga gggccggcc ctagcgtccg gtagcgaagc cagggacgg gctccggag gcagggtcgg ctggagga cggctcgg ttgctctac acttggcaa atgtctcga gttactac atagcatatt ggtatcaa aatgaaatgc aaggaccaa aataacata atlgaaagca gtaaaagga aataaata gaaatcatc agtcaaggaa gacccactgg agaggacaga aatgaagca gttttatc atgtgatt cagcaggct tctgaaat taactaaaa latgactgt cttcttca agaaactgt tttagtac cagttagc aaacaaacca gcccctagac gtaataic tgtatctt gatacact gggaaaaat tataaatat ccttacata ggaatgaga gaaaaaac ctgcaaaa ttatggat attttgcat ttactaga ttcgtgac</p>	A	Homo sapiens

601	190602	G Protein- Coupled Receptor GPCR150	NP_055188.1	<p>ttttactttt ggtaaacatt tccallat tgaatttcag ggatttga cttaataga tiaggttcac taataaccac atctgctat ttactaat taitccttt acttaaggct ttgacatta tccagtttc ctgacagctt gtaagatta ttgcttgaat ttcttaaa caaccaagct ttactiaag tgcataaat taittattt cttacagta atttaattt ggatttcagt ccttgcttat gttttggag acocagccat ctaccaagc ctgaaggcac agaalgctta ttctgicac tgcctttctt algtcagcat tcaaggttac tggctgcat ttttcaggt galgattta ttgtagctt tcaaacctg ttgggaagaa gttactct tggtaagggc taacagata acttactata tgaalgaac taactatatt ttcttttt catccactc cagttaact gtagaacta aaaaatatt cttatcaag ctatgctt gttttcag taccgttga ccatttgaac tactcaggt aatcattgt ttactiaag ttcaattcc agcatatatt gtagatgaata ttccctggtt alacttgc aalagttttc tcatgttac agtgaattgg tttaattgic acaagcttaa tttaaagac attggaattc ctttggatcc attgtcaac tggaaagctt gcttcatcc acttaaat cctaatctt agcaaatlga aaagccctata tcaataalga tttgaata tttaataa aaagttaacag ctgtcataag atcaataatt tatgaacaga aagaactcag gacatattaa aaaaataact gaactaaaac aactttgoc ccttgactga tagcatttca gaalgctt ttgaagggc tatccaggtt attaatagt gttttattt aaaaacaaaa taattccaag aagttttat agttattcag ggacactata ttacaatat tactttgta ttaacacaa aagtgataag agttaacatt tggctactat gatgtttg ttactaaaa aaactactgg algtcaaacgt ttalgaat ctgagatttc actgacaact ttaagataic aacctaaaa ttatttaa algtcaaat gtaagcaaga aaaaaaaa</p> <p>MTALSSENCs FOYQLRQTNQ PLDVNYLLFL ILGKILLNI LTLGMRKNT CQNFMEYFCI SLAFVDLLL VNISILYFR DFVLLSIRFT KYHICLFTQI ISFTYGLHY PVFLTACIDY CLNFSKTKL SFKCQKLFYF FTVLIWISV LAYVLGDPAL YQSLKAQNAY SRHCPFYVSI QSYWLSFFMV MILFVAFITC WEEVTTLVQA IRITSYMNET ILYFPSSHs SYTVRSKKIF LSKLIVCFLS TWLPFVLLQV IIVLLKVQP AYEMNIPWL YFVNSFLIAT VYWFNCHKLN LKDIGPLDP FVNWKCCFIP LTIPNLEQIE KPISIMIC</p>	P	Homo sapiens
602	190623	Melanopsin	AF147788	<p>ggttccacc catcagacca cagcttcacag ccaggagacgc ttgggacaga gtagtcatag gagacatcgt gagcctgaag cttccacgc gggccctctgt gcttccattgg algtcagagct cggggacagac gagcctgcccag gtgggtgtgtgt gtagcaaaagg tttggagcaaa gagcgcctcag gggagcctcc ccagtggtggac agaaagcacag gagtgaaggggt gttggggccct gtagtgaatct cagtgctacc cgcacaaggctt gtagtgacag gcccaltgag aagggacatit gtaggtgtgt acgtggggctt ccaaaaggccc caggcctgggggt gttccgagtc ctctgactt tccctgaggt gctcttttga gggcctgtggc acctgggtta tgggtatcc cggcctcalt gtccacctga caagcacttc tccctggac tccgtgctt gctccatcac ctgcacccct tctaattag caggttggag agtggtgggtcc acattgaatg gtagcgtttgt ttgactcaga attgctccca gctgtgtgagga attgttaaac cctacattia aaacgcaagc agctgtgcatit gagcctatgggt acagaagaaga aagccggccc ctacgcttca cccgtgcccc aggtgtggccct ctgtgtggcca aagcccttga gttgtgaagag ctacagagagga aggtcagctcgt agccatgggc ttgcaagctgc aggtgaatga gtctcccgct ctagtgaagc tgcctccact tctctgctc aaaaaggggt ctccaggtga acigtgttga aagactgtgggt gaaacttctgt aagaggtgtgt alactctgt ccactccaggt gctccacac tccacgact gttgcccaggtc algtgccccca cttagagatga ccgctgtccgt gtcgggtctcc cctaaacgca gctcttgtgt gtagggccag cccgagcagc cctccctgtga agccgtgtgt tcaagcttcc ttcttccag ctctctgctc ctctcttaag acaggggtcag ggtcagaggtccc ggggttcccc ccacttctga catcagta acttgaatga gggcctgtcag cctgtgtgtgt tctctggagc tctccataa aggttttaaa aaatcttat actttaaaa ttctgtccgt gcccaggtgt tcaagcctgt aatcctgtgca ctgtgggtga cgtgaggtgtgt tggatcact gaggtcagga gttcgaagact agcctgtgcca acatgtgtga ctctgtctc tgcataatat acaaaattia gcccaggtgtgt gtgtcaggtgt cctgtatcc cagctactc gtaggtgtgtgt gtaggtgtgtgt tctgtgtgtgt gtaggtgtgtgt gagctgtgtgt gtaggtgtgt gtaggtgtgt gtaggtgtgt gtaggtgtgt gtaggtgtgt gtaggtgtgt gtaggtgtgt actttttat caaaaaacaa gcaaaagccc cctcgtgtgt gtaggtgtgt gtaggtgtgt gtaggtgtgt gtaggtgtgt gtaggtgtgt</p>	A	Homo sapiens

[illegible]

[illegible]

[illegible]

604	190627	G Protein- Coupled Receptor GPR41 & GPR42	NM_005304	GTWAAA WVPL PTVDVPDHAH YTLGTVILL V GLTGMLGNLT VYTFCSR L RTPANMFII NLAVSDFLMS FTQAPVFFTS SLYKQWLFGE TGCEFYAFCG ALFGISSMIT LTAIALDRYL VITRPLATFG VASKRRAAFV LLGVWL YALA WSLPPFFGWS AYVPEGLLTS CSWDYMSFTP AVRATYMLLC CFVFLPLLI IYCYFIFR AIRETRALQ TFGACKNGE SLWQRQLQS ECKMAKIMLL VILLFVLSWA PYSVALVAF AGYAHVLTYP MSSVPVIAK ASAHNPITY AITHPKYRVA IAQHLPCLGV LLGVSRRHSR PYPYSRSTHR STLTSHSTNL SWISIRRRQE SLGSESEVGW THMEAAAVWG AAQANGRS L YQGLEDLEA KAPPRPQGHE AETPGKTKGL IPSQDPRM	sapiens
				atggalacag gccccgacca gctctacttc tccggcaalc acitggitcgt ctctcgggig taccitctca ctttctcgtt ggggctcccc cicaacctgc tggcccttgggt ggctctcgtt ggcaagctgc agccgccgccc ggiggccgig gacgtgctcc tgcacaacct gaccgcctcg gacctctcc tgcctcgtt ccigctttc cgcattgggg aggcagoccaa tggcaltgcac tggccctcgc ccttctctt cggccacac tcttgattca tctctcac caccatctat ctaccgccc tcttctggc agctgtgagc attgaacgt tcttgaggtt ggccaccca cgtgtgtaca agaccggcc gggtcgggg caggcagggtc tgggtgaggtt ggccctcctgg cgtgtggcct cgtctcacig cagcgtgggt taccgtatag aattctcagg ggcacatctcc caccgocagg gccaalgg gacctgtac cgtggagttcc ggaaaggaca gctagccalc ctctgccc ggccgtggga gtaggtgtgt gtcctcttg tggctccgt gatacacc agctactgt acagccgctt gggtgggalt cctggcagag gggtgagcca ccgcccggcag aggaggggtt cggggcgtt ggccggccag cgtctcaact tctgtctg cttgggccc tacaacgtt ccatgtctt gggtatata tccgttgaaa gccggcalt gaggatctac gtagcgttc taccgacct gaactctgt gtcgacct ttgtacta cttctctcc tccgggttcc aagccgact tcatgagctg ctgagaggtt tgggtgggt ctggggccag tggcagag agagcagcat ggagctgaag gaggagaagg gaggggagga gcagagagcg gaccgaccag ctgaaagaaa gaccgtga cactacag gctgtgaac tgggtggcag ggtgctgig ctgaaagta g MDTGPDQSYF SGNHWFVSF YLLTFLVGLP LNLLALVVFV GKLRQRPVAV DVLLNLNTAS DLLLLFLPF RMVEAANGMH WPLPFLCPL SGFIFFTTY LTALFLAAS IERFLVAHP LWYKTRPLG QAGLVSVACW LLASAHCSV YVIEFSGDIS HSQGTNGTCY LEFRKDLAI LLPVRLEMAV VLFVVPLIIT SYCSRLVWI LGRGGSHRRQ RRVAGLLAA LNLFCVGP YNVSHVVGYI CGESPAWRIY VTLLSTLNSC VDPFVYFSS SGFQADFHEL LRRLCGLWGQ WQESSMELK EQKGGEEQRA DRPAERKTSE HSQCGCTGGQ VACAES caagactgt cctcttgc gactacaaga gattggagcc atggcttgg agcagaacca gtaacagat tattatag aggaaaatga aatgaagc actatgact acagtcaata tgaactalc tgaataaag aagatgtcag agaatttga aaagtittcc tccgttatt cctacaata gttttgtca ttggactgc aggcattcc atgttagtgg caattatgc ctattacaag aaacagagaa ccaaaacaga tgtgtacalc ctgaattgg ctgtagcaga ttactctt ctactctc tgcctttt ggctgtat gcagttcag gggtgggttt agggaaaata atgtgcaaaa taactcagc ctgtacaca ctacacttg tctctggaat gcaatttctg gctgtatca gcatagacag atatgtgca gtaactaag toccaagcca atcaggagtg ggaaaacal gcgtgaltat cgtttctgt gtctggalt cgtccatct gctgagcata cccagcttg ttittatag agtaaatgac aatgtagg gcaittccal ttccccgc tacctaggaa calcaatga agcatgtt caaatgttag agatctgag tgaatttga gtaaccttc ttatttgg gggtgtctac ttatcacag caaggacat calgaagtg ccaacatta aaatatctg accctiaaaa gtctgtcica cagtgtat agttttat gtcactaac tgcctataa calgtcaag ttctgcagag ccataagac cactactcc ctgatacca gctgcaacal gagcaaacgc atggacalcg ccatccaagt cacagaaagc atgcgactt ttacagctg ctcaaccca atctttatg	Homo sapiens
605	190627	G Protein- Coupled Receptor GPR41 & GPR42	NP_005295.1	MDTGPDQSYF SGNHWFVSF YLLTFLVGLP LNLLALVVFV GKLRQRPVAV DVLLNLNTAS DLLLLFLPF RMVEAANGMH WPLPFLCPL SGFIFFTTY LTALFLAAS IERFLVAHP LWYKTRPLG QAGLVSVACW LLASAHCSV YVIEFSGDIS HSQGTNGTCY LEFRKDLAI LLPVRLEMAV VLFVVPLIIT SYCSRLVWI LGRGGSHRRQ RRVAGLLAA LNLFCVGP YNVSHVVGYI CGESPAWRIY VTLLSTLNSC VDPFVYFSS SGFQADFHEL LRRLCGLWGQ WQESSMELK EQKGGEEQRA DRPAERKTSE HSQCGCTGGQ VACAES caagactgt cctcttgc gactacaaga gattggagcc atggcttgg agcagaacca gtaacagat tattatag aggaaaatga aatgaagc actatgact acagtcaata tgaactalc tgaataaag aagatgtcag agaatttga aaagtittcc tccgttatt cctacaata gttttgtca ttggactgc aggcattcc atgttagtgg caattatgc ctattacaag aaacagagaa ccaaaacaga tgtgtacalc ctgaattgg ctgtagcaga ttactctt ctactctc tgcctttt ggctgtat gcagttcag gggtgggttt agggaaaata atgtgcaaaa taactcagc ctgtacaca ctacacttg tctctggaat gcaatttctg gctgtatca gcatagacag atatgtgca gtaactaag toccaagcca atcaggagtg ggaaaacal gcgtgaltat cgtttctgt gtctggalt cgtccatct gctgagcata cccagcttg ttittatag agtaaatgac aatgtagg gcaittccal ttccccgc tacctaggaa calcaatga agcatgtt caaatgttag agatctgag tgaatttga gtaaccttc ttatttgg gggtgtctac ttatcacag caaggacat calgaagtg ccaacatta aaatatctg accctiaaaa gtctgtcica cagtgtat agttttat gtcactaac tgcctataa calgtcaag ttctgcagag ccataagac cactactcc ctgatacca gctgcaacal gagcaaacgc atggacalcg ccatccaagt cacagaaagc atgcgactt ttacagctg ctcaaccca atctttatg	Homo sapiens
606	190701	C-C Chemokine Receptor 11	NM_016557	caagactgt cctcttgc gactacaaga gattggagcc atggcttgg agcagaacca gtaacagat tattatag aggaaaatga aatgaagc actatgact acagtcaata tgaactalc tgaataaag aagatgtcag agaatttga aaagtittcc tccgttatt cctacaata gttttgtca ttggactgc aggcattcc atgttagtgg caattatgc ctattacaag aaacagagaa ccaaaacaga tgtgtacalc ctgaattgg ctgtagcaga ttactctt ctactctc tgcctttt ggctgtat gcagttcag gggtgggttt agggaaaata atgtgcaaaa taactcagc ctgtacaca ctacacttg tctctggaat gcaatttctg gctgtatca gcatagacag atatgtgca gtaactaag toccaagcca atcaggagtg ggaaaacal gcgtgaltat cgtttctgt gtctggalt cgtccatct gctgagcata cccagcttg ttittatag agtaaatgac aatgtagg gcaittccal ttccccgc tacctaggaa calcaatga agcatgtt caaatgttag agatctgag tgaatttga gtaaccttc ttatttgg gggtgtctac ttatcacag caaggacat calgaagtg ccaacatta aaatatctg accctiaaaa gtctgtcica cagtgtat agttttat gtcactaac tgcctataa calgtcaag ttctgcagag ccataagac cactactcc ctgatacca gctgcaacal gagcaaacgc atggacalcg ccatccaagt cacagaaagc atgcgactt ttacagctg ctcaaccca atctttatg	Homo sapiens

607	190701	C-C Chemokine Receptor 11	NP_057641.1	P	Homo sapiens	<p>ttttatggg agcatcttc aaaaactiac ttaigaaagt ggccaagaaa latgggtctt ggagaagaca gagaacaagt gtggaggagt ttcttttga ttctgagggt cctacagagc caaccagtac tttagcatl taaaggtaaa actgctctgc ctttgcctg galacataig aalgatgctt tccctcaaa taaacatct gcatlactt gaaactcaaa tctcagagc cgttggtgca actataata aaagaaatgggt tgggggaagg gggagaataa aagccaaga agaagaaact ctcgtgtaac gaagaagagc ttgtgtgtga taatttga aaatgaacaa lataggaata taattgtaac aggcataagt gaalaacact ctcgtgtaac gaagaagagc ttgtgtgtga taatttga tcttgggtgc agtgggtctt atacaact acacaagtga laaalgaca cagaactata tacacactl gtaacaatt caattctcgt gtttgacat latagataa ttaigtaaga tggaccatt ggggaagagc taccagagc cactigtac catcttga acttccgtg aattataat aatttcaaaa taaacaagt taaaaaaa cccactatg lataagtag gcatcaciaa acagattatt aaagagggtc algtlaaag gcaattata ttttttaa ttaiclaagt ttaataaca gaagatttc cctgcataa tttagtact gaataagtat gcagcagaac lcaactalc tttttcgt ttttttaa atttgaagt aattttaa aatccaccic ctcaaaaaa gcaataaaaa aaaaacaac tataaaaaa aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa</p>
						<p>aaaaa MALEQNQSTD YYEENEMNG TYDYSQYELI CIKEDVREFA KVFLPVFLTI VFVIGLAGNS MVVAIYAYK KQRTKDVTYI LNLAVADLLL LFLPFWAVN AVHGWVLGKIMCKITSALYT LNFVSGMQFL ACISDRYVA VTKVPSQSGV GKPCWICFC VWMAALLSI PQLVFTVND NARCIPIPR YLGTSMKALI QMLEICIGFV VPFLMGVCY FITARTLMKM PNKISRPLK VLLTVVIVFI VTQLPYNIVK FCRAIDIYS LITSCNMSKR MDIAIQVTES IALFHSLNP ILVFMGASF KNYVMKVAKK YGSWRRQRQS VEEFPDSEG PTETSTFSI</p>
608	190705	G Protein- Coupled Receptor SALPR	NM_016568	A	Homo sapiens	<p>gatttgggga gttatggcc agtggccagc tgaacggggc acacgggagc ggggaagctgc cgtgtatcat aaggacclag ggactccgag ctggctcga gaaacctggc agccggagtg ctggccttac gggctgcact cctcaactct gctccaagc agccggctgag ctcaactct ggcgccaggc cgttcgctgc ggcgccaggc gctgcttagta cccagttctt gggctctc ttcagtagct gctttgaag ctccacgca cgtcccgag gctagccctgc caacaaaact ggggtgaacc gttgtatct aggctctgic cccacgaaca tgaactagag gtaccctgcgc algcagtagtg ccgaagcagc cagcagtagcc accatgaala aggcagcagc cgggggaac ctagcagaaac tctcagctt ggtcccgagc ctctggaggg cggccaacac gagggtgaac gctgctgctgc agcttccgga ctgtgtgtgg gtagctggggc tggagtggc gtagcggcgc cggccaagac atccccggg cagcggcggc gcaagagagc cggacacaga ggcgggggct cgggaattca tcaagcgttgg gtagtggggc gtagtggcgc tgggggtggc gggcaactct cttgtctct accatgaag gtagcagcag ggtctggcgc agtctctat caactctc gtaccaac tggcgtgac ggaattcag ttgtgtctca ccttgcctt ctggggggc gtagaacgtc ttgacttcaa atggcccttc ggcagggcca tgtgtgaagt cgtgttccalg gtagcgtcca tgaacalgta cggcagcgtg ttcttcta ctggccatgag tgtgacggc laocattggc tggcctcggc tctgaagagc caccgggacc gtaggacagc cggggcgagc tgcctcggcc gtagccctggc gtagcagctgc tgcctcggc ccaagggcct gttgtgtggc atctggggct tggccggcct ggccctcgtc cccagtggca ttttccac cagcgtcaag gtagtggggc gtaggctgc cctgtgtcgt ttcccggaca agttgtggc cggcagacag cagtctggc tggggctcta cactcgcag aaggtgtcgt tggggctcgt gctggcgtc gggcalcata tctgtgcta cctgtgtcgt gtagcgtca tggccgagc cggcggcggc ggggaccaaag gtagggggcgc gtagggccga gtagggccga cggggggcag cgtccggaga ctgtcgaag tcaacaaic agtggaccalc gttgtcgt ccttctct gttgtggc cccaacagc cgtccacac ctggagcalt ctatcaga tcaacgggt ggccttcagc caggagatt tctgtgcca ggtatagcgt ttccctgtga gctgtgtcct agcgcactoc aacagctgcc tcaacccgt cctctactgc ctgtggcc gtaggttccg caaggcgtc aaggcgtc tgtggcgtc tggcgtctct tcatcaca gcalggccc ctacccgc actaacagc cgggagcagc gtagcggggc ctgcaaggcc cggggcggcc ccaaggcggc</p>
						<p>gatttgggga gttatggcc agtggccagc tgaacggggc acacgggagc ggggaagctgc cgtgtatcat aaggacclag ggactccgag ctggctcga gaaacctggc agccggagtg ctggccttac gggctgcact cctcaactct gctccaagc agccggctgag ctcaactct ggcgccaggc cgttcgctgc ggcgccaggc gctgcttagta cccagttctt gggctctc ttcagtagct gctttgaag ctccacgca cgtcccgag gctagccctgc caacaaaact ggggtgaacc gttgtatct aggctctgic cccacgaaca tgaactagag gtaccctgcgc algcagtagtg ccgaagcagc cagcagtagcc accatgaala aggcagcagc cgggggaac ctagcagaaac tctcagctt ggtcccgagc ctctggaggg cggccaacac gagggtgaac gctgctgctgc agcttccgga ctgtgtgtgg gtagctggggc tggagtggc gtagcggcgc cggccaagac atccccggg cagcggcggc gcaagagagc cggacacaga ggcgggggct cgggaattca tcaagcgttgg gtagtggggc gtagtggcgc tgggggtggc gggcaactct cttgtctct accatgaag gtagcagcag ggtctggcgc agtctctat caactctc gtaccaac tggcgtgac ggaattcag ttgtgtctca ccttgcctt ctggggggc gtagaacgtc ttgacttcaa atggcccttc ggcagggcca tgtgtgaagt cgtgttccalg gtagcgtcca tgaacalgta cggcagcgtg ttcttcta ctggccatgag tgtgacggc laocattggc tggcctcggc tctgaagagc caccgggacc gtaggacagc cggggcgagc tgcctcggcc gtagccctggc gtagcagctgc tgcctcggc ccaagggcct gttgtgtggc atctggggct tggccggcct ggccctcgtc cccagtggca ttttccac cagcgtcaag gtagtggggc gtaggctgc cctgtgtcgt ttcccggaca agttgtggc cggcagacag cagtctggc tggggctcta cactcgcag aaggtgtcgt tggggctcgt gctggcgtc gggcalcata tctgtgcta cctgtgtcgt gtagcgtca tggccgagc cggcggcggc ggggaccaaag gtagggggcgc gtagggccga gtagggccga cggggggcag cgtccggaga ctgtcgaag tcaacaaic agtggaccalc gttgtcgt ccttctct gttgtggc cccaacagc cgtccacac ctggagcalt ctatcaga tcaacgggt ggccttcagc caggagatt tctgtgcca ggtatagcgt ttccctgtga gctgtgtcct agcgcactoc aacagctgcc tcaacccgt cctctactgc ctgtggcc gtaggttccg caaggcgtc aaggcgtc tgtggcgtc tggcgtctct tcatcaca gcalggccc ctacccgc actaacagc cgggagcagc gtagcggggc ctgcaaggcc cggggcggcc ccaaggcggc</p>

609	190705	G Protein- Coupled Receptor SALPR	NP_057652.1	<p>ggcggccgg accgtctta ctaccactt ggcgtctgg tctacagcgg gggcgctac gacctgtcgc ccagcagctc tgcctactga cgcaggccct aggccagggg cgcgcctcgc gggcaaggctg gctctccccc ggcggtaaaag aggtgaaagg algaaggagg gctggggg</p> <p>MQMADAATIA TMNKAAGGDK LAELFSLVPD LLEAANTSGN ASLQLPDLWW ELGLELPDGA PGHPGSGG AESADTEARV RILISVYVWV VCALGLAGNL LVLYLMKSMQ GWRKSSINLF VTNLALTDQ FVLTLPFWAV ENALDFKWWPF GKAMCKIVSM VTSNMVYASV FFLTAMSVTR YHVSASALKS HRTRGHGRGD CCGRSLGDS CFSAKALCVW IWALAALASL PSAIFSTTVK VMGEELCLVR FPDKLLGRDR QFWGLYHSQ KVLGFLVPL GIILCYLLL VRFIADRRAA GTKGGAAVAG GRPTGASARR LSKVTKSVTI VVLSFFLCWL PNQALTTWSI LIKFNAPFS QEYFLCQVYA FVSVCLAHNSCLNPVLYC LVRREFRKAL KSLLWRJASP SITSMRPFTA TTKPEHEDQG LQAPAPPHAA AEPDLLYYPP GVVYSGGRY DLLPSSSAY</p>	P	Homo sapiens
610	190711	G Protein- Coupled Receptor GPR85 (SREB2)	NM_018970	<p>ggcagcagga ttatctgt gctcaagat cagattatta ctgtagagaa gatititit ttgtttca ttaacagatt attataaagc aaaaagcatg cagaaaaaga agcagagcgt ttacatiggg aattaatgaa agcgtgtcgc ctagtittgg gtagggagaaac tgggaagtgg ttgcttaaaa ttatata cctcacaaa caaaactct cggaaatggg aaaaataagaa aatgcattgat tctagaggca ttcttaagca cccagctgc agcgtttgg ggtctgtggg taltatocga cgtttggac tggttagggc ttactggag cttcattct ggaaagoccti acaagactga ggaatctag actcgaaic accgggaacg gttcttgc agcacagaag caatctct cccatctc gcatattct atggcaaac aagtggaaga aaagaggaag catgactgca gatcagatca gttctcttg tggattat tttagtaaa algtatggat ctactttc ctgttcta taltagatc atgagactgg actgaggcgt taltctatc ctccatcat ctatggcga ctatggcat gcagctgaca acatttgc aaatcttcg ccttaacag ccttttgaa actgactcc ttgggtttca taataggagt cagcgtggg gggcaacctc tgaictocat ttgtctagtg aaagataaga octtgcatal agcaacttac tactctgt tggactttg ctgtcagat atctcagat ctgcaattg ttcccatt ggttcaact ctgtcaaaa tggcttaac tggacttatg ggactctgac ttgcaagtg atggcttc tgggggttt gctctgttc cacactgt tcaictct ctgcatcagt gtcacagat acttagctat cggccatcac cgtcttata caaagagcgt gaactttgg gaactttgg cgtgtctgg taltgtgtgg actctgtcgg tggccalggc atttccccg gttttagag tgggcaacta ctacttalt agggagaggaag atcaatgcat ctccaacac cgtctcttca gggctaaga ttacttagga ttatgtcgt ttctgtct calctctcta gccacacagc ttgtctact caagctgala ttttcgtcc acgactgaag aaaaatgaag ccagtcacagt ttgtagcagc agtcagccag aaactggact ttcatggtc tggagccagt ggcagggcag ctgccaattg gctagcagga ttgggaagg gtcacacacc acccaacttg ctgggcalca ggcaaaatgc aaacaccaca ggcagaagaa ggclattgt cttagacgag ttcaaaalg agaaaaaat cagcagaalg ttctatataa tgaactttct gtttctaac ttgggggoc cctactgtt ggcctgtat tggagaggtt ttgcaagagg gctgtatga ccaaggaggat ttcaacagc tgcgtctgg alagtttg cccaagcagg aatcaatct ttgtctgca ttitctaaa caggggagcgt aggcgtgt ttcaagcaac cctctttac tgcagaaaaa ccaagttacc aagggaacct tacttgta tatgaggag calctgtaaa tcttagcct tgtgaaaact aactctct gctgagcaat tggggccat agccatatt tgaagaagaa ttcaagaaag gaalcaagcag tttaaggat ttgggcaaca ttctgctgic ttgcaalag ttacattata alccatttt aaatctcaga gtgtactgc tgaactgocag caaagggttg taataagaa gggaactgaac cactgoccta agttcttta tgggtcaaa aactagataa tgaagtagc aggtgtcgaag taltcagct aaatgctcgt talgtacta calatgaaaa aacataaaaa aacaatagc attggacatc taalaatit aagtgtacat gagggtaaalg tgtgataaa aactaatit agaaagttag agacttaaa acatttata ctacttgt tttgcagaaga ctaaaaat ttgggactga aagtagta atccataaa gacgtgcca tgaattatg gaalacaca cttaaaaac cgctctgtaa gttctgggga gcaltcaaa gcagtatatt gggttcaatt agagttaatt ttittgat taalacattg ctatttcaa</p>	A	Homo sapiens

611	190711	G Protein- Coupled Receptor GPR85 (SREB2)	NP_061843.1	<p>alaccacttt cctcalciac tagiaagatt gciagcattg aaciagiatta tgggtttt gtigatttgg tataaagttt ttcaaltica tttatattt acaaalgieta galattggc tgggaggcaa caltaalgg accagccgt cacacigag cagtttcaat aalgcagaat aaatacatgt tgcctaaag ggtatciag tatcttcal ctattttag actggagcaa alagccaagg gaaatcaaat cagtaaciggg tcalggctat gcalciaaaa gfgcaggaa gatcatttat tacttttcc ttttttcc acatgggttg aaactlaaag tgcacalcac tgaalaaag agattttct clacgggttg clacccttc taaactgtc taaagaagcag gcatgtgag tagtttiala ttttaagica gcgtgaagg ggaagaccaca goccitagtat gacalcgcg acaatttgg aagcatttat tciatigaa gacacagicti gtttialacti tcigcacatt cagtgattg gtaatttaaa ttatticagt tttaactgt gaaagcttat attatgattt ciggatttt agaaatacal tagagictgt gagtcatt cttaagata cagatgttg aacticaata taaagtigca ttgccaaaa ttaccgcg lagocigtia attttctga aataagttt acatttttg cacatacaa cgtttttt aatttggag gcaagacaaa actaggaaaga clagctttat tatgttttg ctttttgat ctgttagctia clatattca gactggaaat giatgaatga taatcaaat aatgcigata aactigacata atattatcig taaaagcatt atttggtagi ttattatcat catocctcia ttattcttaa alggcagtag tattagaga tgttaccig cttagtaat tggctcagaa tttaalata aacalcacac tttaattgg agcataglac catagaaat tggggctcia aatataaac tigliaagaag aalggtttac actaacattia tgcacaaact agaaaaagt attattttg ttgctttct gtgtttgt ttatggttg gttttctga agtttattt ttttttga ttgataatt aagattaga atctaatac acagaattcc alattgctat agtactcig taaagagaat atcaataaa ataagaaa taaatcaag aatgtttca atggtataa aaaaaaaa aaaa MANYSHAADN ILQNSPLTA FLKLTSLGFI IGVSVVGNNLL ISILL VKDKT LHRAPYYELL DLCCSDILRS AICFPFVFN S VKNGSTWYTG TLTKKVIAFL GVLSCFHTAF MLFCISVTRY LAIAHHRFTY KRLTFWTCLA VICMVWTLVS AMAFPVLDV GTYSFIREED QCTFQHSFR ANDSLGFMLL LALLLATQL VYLKLIFFVH DRRKMKPVQF VAAVSQNWF HGPASGQAA ANWLAGFGRG PTPPTLLGIR QNANTTGRRR LLVLDEFKME KRISRMFYIM TFLFLTWGP YLVACYWRVF ARGPVVPGGF LTAAVVM SFA QAGINPFVCI FSNRELRRCF STTLLYCRKS RLPREPYCVI</p>	P	Homo sapiens
612	190725	G Protein- Coupled Receptor GPR26	LG93120	<p>aggclagtg agctcttc caccgtgccc atcggtccc actgggggt gctgtcaag tgcitggcgt acagcaagg cgcatccgac ccttttgt actcttact ggcacaccag taccgcaaa gctgcaagg gattctgaac aggtctcgc acagacgtc catccatcc tctggctca caggcagtc tcacagccag aacattcgc cgggtctiga g MNSWDAGLAG LLVGTMGVSL LSNALVLLCL LHSADIRQA PALFTLNLTC GNLLCTVNNM PLTLAGVVAR QPAGDRLCR LAFLDTFLA ANSMLSMAAL SIDRWVA VVF PLSYRAKMRL RDAALMVAYT WLHALTFPAA ALALS WLGFH QLYASCTLCS RRPDERLREA VFTGAFHALS FLFSFVVLCC TYLKVARFHC KRIDVITMQT LVLLVDLHPS VRERCLEEQK RRRQRATKKI STFIGTFLVC FAPYVITRLV ELFSTVPIGS HWGVLSKCLA YSKAASDPFV YSLLRHQYRK SCKEILNRL HRSIHSSGL TGDHSQNIL PVSE</p>	A	Homo sapiens
613	190725	G Protein- Coupled Receptor GPR26	LR26	<p>atggccaaca ctaccaggaga gcttggagag gtagcggcg cttgtcccc accgtccgca tcaagtatg tgaagcgtgt actgttggga ctgattatgt gcgtgagcct ggcgggtaac gccatttgt ccttgttgtt gctcaaggag cgtgcccigc acaaggctcc ttactactc ctgtggacc tgtccctggc cgalggcata gcctctggcg tctgtccc ctltgtcgt gcttctgtc ggcacggctc ttatggacc ttcatggcac tgcgtgcaa gatitggcc ttatggccc tgccttttg ctccalcg gcttcalgc tgttctgcat cagcgtcacc cgtacalgg ccatggcca ccacgcctc tacggcagc gcalgacact ctggacalgc ggcgctgtca tctgcatggc ctggaccctg tctgtggcca tggcctccc accgtctt gacgtgggga cctacaagt tattcggag gaggaccagt gcalcttga gcatcgtac ttcaaggcca algcacagctt gggctcag ctatgttgg cigtgtcat</p>	P	Homo sapiens
614	190741	Sreb3	NM_018969	<p>atggccaaca ctaccaggaga gcttggagag gtagcggcg cttgtcccc accgtccgca tcaagtatg tgaagcgtgt actgttggga ctgattatgt gcgtgagcct ggcgggtaac gccatttgt ccttgttgtt gctcaaggag cgtgcccigc acaaggctcc ttactactc ctgtggacc tgtccctggc cgalggcata gcctctggcg tctgtccc ctltgtcgt gcttctgtc ggcacggctc ttatggacc ttcatggcac tgcgtgcaa gatitggcc ttatggccc tgccttttg ctccalcg gcttcalgc tgttctgcat cagcgtcacc cgtacalgg ccatggcca ccacgcctc tacggcagc gcalgacact ctggacalgc ggcgctgtca tctgcatggc ctggaccctg tctgtggcca tggcctccc accgtctt gacgtgggga cctacaagt tattcggag gaggaccagt gcalcttga gcatcgtac ttcaaggcca algcacagctt gggctcag ctatgttgg cigtgtcat</p>	A	Homo sapiens

615	190741	Sreb3	NP_061842.1	gagcagdiacc calgcigtct acgggcaagct gctctcttc gagtatcgtc accgcaagat gaagccagtg cagatgggic cagccalcag ccagaactgg acattccalg gtcocggggc caccggccag gctcigcca actggatcgc cggctttggc cgtggggcca tggccaacac cctgctgggt atccggcaga algggcagtc agccagccgg cggctactgg gcatggacga ggccaagggt gaaaagcagc tgggcccgat gtctacgcg atcacagtc tacttgcca cgtcgtttg gatggagctc tggcctgcta cggcgagtg ttgtgaaag cctgtgcgt gcccacccgc taccggcca cgtcgtttg gatggagctc ggccaggcgt ccgtcaacc aatgtcgc ttccgtcga acaaggacct caagaagtcg ctagggactc agcccccg ctggggcaca ggaggggccc cggctccag agaacctac tgtcaltg ga MANTTGEPEE VSGALSPPSA SAYVKLVLLG LMCVSLAGN AILSLLVLKE RALHKAPYYF LLDLCLADGI RSAVCFPFVL ASVRHGSSWT FSALSKIVA FMAVLCFHA AFMLFCISVT RYMAIAHHRF YAKRMTLWTC AAVICMAWTL SVAMAFPPVF DVGTYKFIRE EDQCFEHRY FKANDTLGFM LMLAVLMAAT HAVYGKLLLF EYRHRKMKPV QMVP AISQNW TFHGPATGQ AANWIAFGF RGPMPPTLLG IRQNGHAASR RLLGMDEVKG EKQLGRMFYA ITLLFLLWS PYIVACYWRV FVKACA VPHR YLATAVWMSF AQAAVNPVC FLLNKDLKKK LRTHAPCWGT GGAPAPREPY CVM	P	Homo sapiens
616	190742	G Protein-Coupled Receptor H7TBA62	E32367	gagctcgtc cacagcagag agcagggaag ggggggaagc cggcgataga ggtagcagg aatgtaaat talcaggagc agggaacagaa ctaggggcat gcccaggctc acacaggccc tcalaggccc agtgttccca gtagggagga aacagggaagc tgtgacttcc tctcttctt cctctcgtc tettagctc aaggctacgt cgtctgagat gaattccaa cgttttagt tggcactgt ccttggggcat ggtaalagcc tctcgtacc cttctgccc aaacaccca aactctctc tgaataat altcalcaa attgtattt cacaltgatt cttctatgc atcaltgccc tctgtgaaag cagacttaac tgaataattt aagcaagaaa acaggcttag gggagtaaaag taactctcc agtcacacgg clagttagca gcaggctcgg gactccggcag cctccgtct ttctctctt ggacacccat gctgattccc tgcctatg ccacttoca ggcccctgc ttggggccc aagggaacac ttittgcaga ggaggggggc ctgcacgtc ttgggaacag aggcagctct agtttggctc cgtcaltc tgggacaggg aaacctocag ctctctctt ggggtggagg ctggggcgtc cctccalag cggggtaact ctcccttc cctccctct cgtccaltta gtagccctct lacaggcggg cgcaltgaca tatacctgg caltcaggct gttgctcggc cgtcccccac taccaccaat ctgaccaac agggaagggg tgggtgtcc ttccacac cctccctcgt aggtgtgggg gtagggccagg gctcaccaga ggcccagag aagcacttaa ttccacagc tcttccag agccttcagt ggccctgtcc agtctggcag acactgtcag acctcttc tccagccac caaltctga tgcctgcga tggccacat caaltctt gctctccac ccaaltctt ctgggccaat gctccggag gcagtgtgtc gtagtctgat gtagtctcga tgcctgcaaa altccagoc ctgaggctca tgggtgccc ggcctatggg ctgtgggggg ccaltggctt gctgggaaat ttggcgggtc tgggggtact gtagtaactgt gcccggagag cccctggccc acctcagac acctgtct tcaactggc tctggggggac ctggggactgg cactactct ccccttttgg gcagccgagt cggcaltgga ctttcactgg ccttcggag gtagccctcgt caagatggtt ctgacggcca cgtccolcaa cgtctatggc agcaltctcc tcalcacagc gctgagcgtt gctcgtact ggggtgtggc calgggtcgt ggccagagca ccaactctc actcttcgg gcccgaalag ccacctggc agtgtggggc gtaggtgtcc tgggtgacgtt gcccacagct gttctgggg tggagggtga ggtgtgtgt gtagccctt gctgtcgtc ttcccagc aggtactggc tggggggccta ccagctgca agggtgtgtc tgggtttcat ggtggccgtt ggggtcalca ccacagcta cctgtcgtc ctggcctcc tgcaggggcg gcaacggcgg cggcagggtc gtaggggtc gtaggggtc gtaggggtc gtaggggtc gtaggggtc gtaggggtc ccaacatgt ggtcactc tgggggtgtc tgggtgtgt tgaactgtt ccttggaa gtaggttca tacttoca acgtatgt tccctgtac tactgttc gacacagca alagctgtt caacctgtt cgtactgtc tcttggggc gtagggggc caggctctc caggcacctt cagggtatc cgggtcagg gtagggggc tgggtgcaac aggtggccct	A	Unidentified

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SALDFHWPF GALKCMVLT TLNVYASIF LITALSARY WVVAMAAGP
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617 190742 G Protein- ENSP00000201 359
Coupled Receptor
H7TBA62

618 190743 G Protein- NM_018654
Coupled Receptor
GPCR5D

619	190743	G Protein-Coupled Receptor GPRC5D	NP_061124.1	galtcaggag gaggataa MYKDCIESTG DYFLLCDAG PWGIIIESLA ILGIVVTILL LLAFLFLMRK IQDCSQWNVL PTQLFLLSV LGLFGLAF AF IIELNQQTAP VRYFLFGVLF ALCFSCLLAH ASNLVKLVRG CVSFSTWTTIL CIAIGCSLLQ IIAITEYVTL IMTRGMMFVN MTPCQLNVDF VVLL VYVFLF MALTFVSKA TFCGPCENWK QHGRLIIFTV LFSIIWVWV ISMLLRGNPQ FQRQPQWDDP VVCIALVTNA WVFLLYIVP ELCILYRSCR QECPLQGNAC PVTAYQHSFQ VENQELSRAR DSDGAEDVA LTSYGTPIQP QTVDPQTQECF IPQAKLSPQQ DAGGV	P	Homo sapiens
620	190744	G Protein-Coupled Receptor GPRC5C	NM_018653	cgggagggg ggggaaccc cgaagaggg cctgggtcac agcaccctg aagacagcca ttggccatgg gggaccaacc agagccctgg cgggagcca ggaaggccat ccacaagcc ttgggtgatg gcttgggact ggcctctc cigtccag gggctgggg ccaggggccat gtccacccg gctgcagcca aggcctcaac cccctgact acacccctg ttgacgctct ggggcgtggg gcalcgtct ggaaggccgg gcatgtcac cagctttg ctaacctca tccctggggc cagccctccc ttggcagg acaccaagaa accgagcctg cgggggaacc aggtattct ccttcgggg accctggggc tctctgct cgtgttggc tgtgtgtga agccgactt ctcacctgt ggcctcggc gcttctct ttggggcttc ttgccaatc gcttcttg ttgggggct cagctttg ccctcaact cctggccggc aagaaaccag gggccgggg cgggtgtc ttcacttgg cctcgtct gacccgtgta gaggctcalca tcaalacaga ggggtgtc atcacccctg ttgggggag ttggcagggg gggccctcagg gcaacagcag cgcaggctgg ggcgtgggct cccctgtg cgtcggcaac atggacttg tcatggcact catctacgt atgtcgtcgc ttgtggggc cttcctgggg ggcctggccg cctcgttgg ccgtacaag cgtcggcgtg agcatgggg cttgtgtc ctaacacag ccacctcgt tgcataatgg gttgtgtg tegtcatgta lacttggc aacaagcag acaacagct ccactgggag gaaaccagc ttggccatgc cctcggcc aatgcttggg ccttctgct cttctacgt atccccagg ttccaggt gacaaagct agccagagc aaagctacca gggggagcag taccccacc ggggcgtggg ctatgagac atctgaaag agcagaagagg tcaagagcag ttctgtggaga acaaggcct ttccatgat gaggcgttg cagctaaag gcccgtgtca ccalacagc ggtacaatgg gcaagctcgt accagctgt accagccac ttgagatggc ctgaltgcaca aagtctcgt cgaaggagct taccatcalca tctccacag gggccacg aacaagcagg tgaaggcag tgcacatcg accctggg ctaagacat gactcggcc cagagccac agggggccac accggcaaa gacggcaaga actcagag ctttagaac ccttactgt gggactgagt cagcgggtggc gaggagaggc gggcggatt ggggagggc ctgagagctt gggccggggc aaggagctt ccaaggctct cctccctg gcaaggcagc aacatgtgc ccagatcgg aaggccctc cttctgcga gttttgggt ggggtgtcag ggtgtcca cccacttc agtgttgg ggtcagaga gcaacccca ggcctcgtg ttctgtgaga ttctgcaac ctcaagagac ttccagggc ctgaggcctg tgggggtgt ggcgtggcag cgcctatgt tctcggaga ttctgcaac ctcaagagac ttccagggc ctgaggcctg gactgtc cttgtgagg acaagggtg cctaataat acattctgc ttatataa aaaaaaaaaa aaaa MGTQPEPLG ARMAIHKALV MCLGLPLFLF PGAWAQGHVP PGCSQGLNPL YYNLCDRSGA WGIVLEAVAG AGIVTTFVL TILVASLPFV QDTKKRSLG TQVFLGLTL GLFCLVFCV VKPDFSTCAS RRFLFGVLF ICFSCLAAHV FALNFLARKN HGPRGWVIFT VALLTLVEV IINTEWLIT LVRSGEGGP QGNSSAGWAV ASPCAVANMD FVMALIYVML LLLGFLGAW PALCGRYKRW RKHGTVLLT TATSVAIWV WIVMYTYGNK QHNSPTWDDP TLALAAANA WAFVLFYVIP EVSQVTKSSP EQSYQGDMPY TRGVGYETIL KEQKGQSMFV ENKAFSMDPE VAAKRPVSPY SGYNGQLLTS VYQPTMALM HKVPSEGAYD IILPRATANS QVMGSANSTL RAEDMYSAQS HQAATPPKDG KNSQVFRNPY VWD	A	Homo sapiens
621	190744	G Protein-Coupled Receptor GPRC5C	NP_061123.2	galtcaggag gaggataa MYKDCIESTG DYFLLCDAG PWGIIIESLA ILGIVVTILL LLAFLFLMRK IQDCSQWNVL PTQLFLLSV LGLFGLAF AF IIELNQQTAP VRYFLFGVLF ALCFSCLLAH ASNLVKLVRG CVSFSTWTTIL CIAIGCSLLQ IIAITEYVTL IMTRGMMFVN MTPCQLNVDF VVLL VYVFLF MALTFVSKA TFCGPCENWK QHGRLIIFTV LFSIIWVWV ISMLLRGNPQ FQRQPQWDDP VVCIALVTNA WVFLLYIVP ELCILYRSCR QECPLQGNAC PVTAYQHSFQ VENQELSRAR DSDGAEDVA LTSYGTPIQP QTVDPQTQECF IPQAKLSPQQ DAGGV	P	Homo sapiens

622	190745	G Protein-Coupled Receptor LGR7	NM_021634		<p>atgacatcgt gtctgtctt ctctacatc ttaattttg gaaaalattt ttctcatgg ggtggacagg atgtcaagg ctccctlggc tattccctt gttgggaacat cacaagatgc ttgcctcagc tctgcacgt taaggggtg gagcactggc ggaatcaggc cgaatgaggac aacttggag acaacaalg atgttccatg caatttgaca aatattgc cagttactac aaatlgactt cccaatalcc tttagggca gaaacacctg aatgttgggt cgggtcttggt ccagtgcaat gtcttgcca aggtctggag ctgactcgt atgaaaccaaa ttacgagct gtccatcgg ttctcaaa tggactgca atgcactc agtggactt aataagaaga cttctcctg atgtctcaa gaattatcat gactctcaga agctgtacct gcaaaaacat aagattacat ccatlccat ctatgcttc agaggactga atagccctac taaactgcat ctacgtcala acagaataac ctccigaag ccgggtgttt tgaagaact tcaagacta gaatggctga taattgaaga taatcaccic agtcgaattt cccaccaac attttatgga claaattc ttatctt agtctgtg aalaacgtcc tcaccgttt acctgataaa cctctctc aacacatgcc aagacatcat tggctggacc ttgaaggcaa ccalatccat aatttaagaa atttgacttt tatttctcgt aglaatttaa ctgtttatg gtaggggaaa aacaataa atcatctaaa tgaataalact ttgcaccic tccagaagaact ggaatgaatg gatttaggaa glaataagat tgaataat ccaaccgtta tattcaagg cclgaaggag ctgtcacaat tgaatcttc ctataatcca atccagaataa ttcaagcaa ccaatttgat tatctgtca aactcaagtc tctcagccta gaaggatg aaatttcaaa latccaacaa aggatgtta gacctctat gaalctict cacalattt ttaagaat ccaatctgt ggtatgac cacalgttcg cagctgtaaa ccaaacactg atggaattc atctctagag aatctctgg caagcattat tcaagagata ttgtctggg ttgtatctgc agttacctgc ttggaaaca ttgttcat ttgcagcga ccttatca ggtctgaaga caagctgtat gccatgcaa tcaattict ctgctgccc gactgctaa tgggaalata ttattctg atcggaggct ttgacctaaa gtttctgga gaatacaala agcatcgca gcttggatg gagaatctc atgtcagct tgaaggact ttggaccat tgcacaga agtatcagtt ttactgtaa catctctgac atttgaaaaa tatcatgca ttgctatcc tttagatgt gtaggacctg gaaatggcag aacaatiaca gtctgattc tcaattggat tactgtgtt alagtggtt tcaatcatt gagcaalaag gaattttca aaaaactata tggaccaat ggaatgact tccctctca ttcaagaat acagaagaia ttggagcca gattttica gtagcaatt ttctggat taattggcc gcattttca tcalagtitt ttactatgga agcatgttt alagtgtca tcaagtgcc ataaagcga cigaataacg gaalcaagtt aaaaaagaga tgaatctgc caaagttt ttcttatag tatttactga tgcattatgc tggatacca ttittgtat gaaattttt tcaatgctt aggtagaat accaggtacc ataaccttt gggtagtgat ttattctg ccatiaaca gttcttgaa cccaatttc tatatctga ccacaagacc atttaagaa atgattcact ggtttggia taactacaga caaagaataa ctatggacag caaaggicag aaaaacatag ctcatcatt catctgggtg gaaatggcc cactgcagga gtagccactt gagttaatga agccggacct ttccacatc cctctgaaa tgtcactgat ttccaatca acgagactca attctatc atga</p>	A	Homo sapiens
623	190745	G Protein-Coupled Receptor LGR7	NP_067647.1		<p>MTSGSVFFYI LIFGKYFSG GQDVKCSLG YFPCGNITKC LPQLLHCNGV DDGNGQADE NCGDNNGWSM QFDKYFASY KMTSQYPFEA ETPECLVGSV PVQCLCQGLE LDCDETNLRA VPSVSSNVTA MSLQWNLIRK LPPDCFKNYH DLQKLYLQNN KITSISYAF RGLNSLTLY LSHNRITFLK PGVFEDLHRL EWLIIEDNHL SRISPPTFYG LNSLILL VLM NNVLTRLPK PLQQHMPRLH WLDLEGNHIL NLRNLTFISC SNLTVL VMRK NKINHLNENT FAPLQKLDL DLGSNKIENL PPLIFKDLKE LSQLNSYNP IQKIQANQFD YLVKLSLSL EGIEISNIQ RMFRPLMNLH HYFKKFQYC GYAPHVRSC PNTDGISSLE NLLASIIQVR FVWVVSATC FGNIFVICMR PYRSENKLY AMSIISLCCA DCLMGIYLFV IGGFDLKFRR EYNKHAQL WM ESTHCQLVGS LAILSTEVSV LLLTFLTEK YICIVYFRC VRPGKCRIT VLLIWTGFI VAFIPLSNK EFFKNYYGTN GVCPLHSED TESIGAQIYS VAFELGINLA AFIIIVFSYG SMFYSVHQSA ITATEIRNOV KKEMILAKRF FFIVFTDALC WPIFVVKFL SLLQVEIPGT ITSWVVFIL PINSALNPIL YTLTRPFKE MIHRFWYNYR QRKSMDSKGQ KTYAPSFIVV EMWPLQEMPP ELMKPDULTY PCMSLSISQS TRLSNSYS</p>	P	Homo sapiens

624	190748	GPCR Ls190748	AX147756		A	Homo sapiens	<p>gtctgggggt gggggatgct ggggacagggg tcaattgctt gaaagcaatg ctctcalccc cctagtctct gctgatctag ttggggctcc agagtgggga ggaagaaaggc acttggaaac ttctctggcc ttaccgtctt agccatcaaa ctctgagctg gagaatgta cgalgtgaca ggaactttcc ctggggctct ctggggccaca attctggcc gagaagaaaga ggaagaaaga ggtgagcacc ttctcactc ctaggggccat gttgtgagagc tgcagtgcga cctctcttg ccaataggca tagatgagt ggttgaagcag ggaagtggcc accgocgagca ggcacagglia ccgttcagc actaggtaga ggtgacacdc ctggcaggcc acctgcacaa tgcagtgat aaggaaggggg gtccaggata ggcacaaagt ccaataggca acagacacag tacggaagag ttgaaatg ctgggagctcc gtgggagtcg ataactcca ggcaltggc ctgcalgtc ctgcalgtc calcttcca atctctggc ttgtcalgga ggcacttg agcalgtcc agtagaagaa gacaaaggg agcalggctg ggaagaaaggc aacgcagggag agggcagca gaaagtgaagg gtgaatata gcaaaagagc tgcaltggcc ttgttaggca gtctctggga acatggggat tccagtgagg aggaagccaa tgaagtgaaga cactaacac agccggcaca tgcaggccccc ggcacggaac ccactalga tctcaagta gcgggaaggcc tcttgatgg caaggtaacct gtcaagggtg atcagcalga ccgtgaaggac agaaggcagct gcggaggaag tacaatagc calccgaggg ctgcacaggg tctctgtgt gggccgagaa gggctggaga gctgtctgt ggttagggca gaaatggcca caccatcaa ggtgtcagcc acagccagat tcaagggtga gcaagagactg acaccalcal tctgtggat caacagcagc acagccacag ccactagtgt gttagtga atgaltgagg aggcacaggac agcaaggatc actcaaalg agaaagatga ttcalgtct cgaagtggca ggaacttact taccaggcca tg</p> <p>MESSFSFGV L AVLASLIA TNLVAVAVL LLIHKNDGVS LCFTLNLA VA DTLIGVAISG LLTDQLSSPS RPTQKTLCSL RMAFVTSSAA ASVLTVM LIT FDRYLAIKQP FRYLKIMSGF VAGACIAGLW LVSYLIGFLP LGIPMFQQT A YKGCQSF FAV FHPHFV LLS CVGFPPAMLL FVFFYCDMLK IASMH SQIR KMEHAGAMAG GYRSPRTPSD FKALRTVSVL IGSFALSWTP FLITGIVQVA CQECHLYLVL ERYLWLLGVG NSLLNPLIYA YWQKEVRLQL YHMLGVKKV LTSFLFLSA RNCGPERPRE SSCHIVTISS SEFDG</p>
625	190748	GPCR Ls190748	CAC39548.1		P	Homo sapiens	<p>atggccaact ccacagggt gaaagccca gaaagtcag gctcgttggg gttgaltctg gcaagctgtgc tggagggtggg ggcactgtg ggcacggcg cgtctgtgtg cgtgtgtgtg cgtcagccgg gactgtgcga cgtcgtctac ctggcgcaac tgtgtgtgt ggaactgtgt ggcggcgctt ccalcagcc gctggggctg ctggccggcac cgcggccgg gctggggccgc gtgcggcgg gcccggcggc atggccgccc gctcgttcc tctccggcgc tctgtgtgg gctgtcagc tgggggtggc cgcacttggc ctggcagct accgctcal cgttcacccc ctggcgccag gctcggcgccc gcccggctgtg ctgtgtctca ccccggtgtg ggcggcgggc ggaactgtgt ggcgctctc cctgtcggc ccggccggccc caocggccccc tgcctgtgt cgtctgtgg tctgtgtgg gggcctggg ccttccggc cgtctgtgg cctgtgtgg ttcggcgtgc cggccctct gctgtcggc gcttaccggc gcalctgt ggttggcggt cgcgtgtccc tgaagccccc accggcgggc cgcgggttcc gactcgcic ggaactctg gtagccggc ttccaltt cgcggcgctc cggctcggc tggcgggggg caaggcgggc ctggccccc cgttggcgt gggccaattt gcaagctgt ggttgcctta tggctgtgc tgcgtgtgc cgcagcggc ggcggcgga ggcgaagcgg ctgtcactg ggtgcctac tggccttgc cggctcacc cttcctgtac gggcgtgtgc agcgccctg gcgcttggca ctggcgccc tctctggc tgcactgct ggaactgtg gggcctgtcac tccgcaagcc tggcacccc gggcactt gcaatgctc cagaacccc cagagggccc tgcctgtagg cctctgtagg ctccagaaca gaccccgag ttggcagag ggcggagcc cgcataccag gggcacttg agagtct ctctga</p> <p>MANSTGLNAS EVAGSLGLL AAVVEVGALL NGALLVVVL RTPGLRDALY LAHLCVVDDL AAASIMPLGL LAAPPGLGR VRLGPAPCRA ARFLSAALLP ACTLGVAALG LARYRLIVHP LRPGSRPPV LVLTA VWAA GLLGALSLLG PPPAPPPAPA RCSVLAGGLG PFRPLWALLA FALPALLLLG AYGGFVVAR</p>
626	190749	G Protein-Coupled Receptor GPR62	AF317653		A	Homo sapiens	
627	190749	G Protein-Coupled Receptor GPR62	AAK12638.1		P	Homo sapiens	

629	190774	Histamine H4 Receptor	NP_067637.2	<p>acatttatt agtttggtta tgtttgtcc tttaaaca ttitttttug agatgggggt ctgtctctgt tggccacgca ggaagtgcagt ggcaltctd cagctcactg cagcccgag tgcclaggt ccagaatct tctacgtca gctccacagag tagctgggac cgaggcact tgcaccacg cccactaaa aatttttaa atgttgct tcttgaagt gtctctgcc tgtctttgc acaaatitc attttica tagttaatt catctctcg gtaagattt atgggttt ctittaaac ttgcagtic ttacccgtt tgggtattt calgtttct agaaacttia aaccttiaac ttcaacatt aaaaatacaag tcttttaagt acalgaagtc ttgaatagt acataatgt talatacact talgccttac attaaagcc aataigaaga atacatgtt aacatcaat aataattta aaaatttgag aataaactc tcaataatgc aaaaaaaa aaaaaaaa</p>	P	Homo sapiens
630	190823	Formyl Peptide Receptor 1 (FPR1)	NM_002029	<p>MPDTNSTNL SLSTRVTLAF FMSLVAFAIM LGNALVILAF VVDKNLRHRS SYFFLNLAIS DFFVGVISIP LYPHILFEW DFGKEICVFW LTIDYLLCTA SVYNIVLSY DRYLSVSNV SYRTQHTGVL KIVTLMVAVW VLAFLVNGPM ILVSESWKDE GSECEPGFES EWWYLAITSF LEFVPVILV AYFNMMIYWS LWKRDHLSRC QSHPGLTAVS SNICGHSFRG RLSSRRSLA STEVPASFHS ERQRRKSSLM FSSRTKMNSN TIASKMGFS QSDSVALHQR EHVELLRARR LAKSLAILLG VFVVCWAPYS LFTIVLSFYS SATGPKSVVY RIAFWLQWFN SFVNPLLYPL CHKRFQKAFK KIFCKKKQPL PSQHSRSVSS</p>	A	Homo sapiens
631	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	<p>cccagacta gaactacca gagcaagacc acagctggig aacagtcacg gacagacaa gategagaca aattccctc tcccacgaa catctctga gggacacctg cigtatcgc tggctatc tctctgata tcalcatt tctgtatt ggcagcact ttgtctcgg ggtctggcg aacggcgctg tgaatgggtt ggcctggatic cggatgacac acacagtcac caccatcagt taccgaacc tggccgtggc tgaatctgt ttacctcca ctgtccatt ctatcatt cggatgagtc ttcttgatc cctcatcgc tctggaccgc ggctggctt tggcaaat cgtcttacc alagtgga tcaatgtt cggatgagtc ttcttgatc cctcatcgc tctggaccgc tgttttgcg tcttgatcc agcttgacc cagaaccacc gcaccgtgag cctggcccaag aaggttgatca ttgggcccgt ggatggct ctgtctca catggcagt tatctctg gtgactacag taactggtaa aacgggggaca gtagccigca ctttaact ttcccccgg accaagacc ctiaaagaag galaaatgfg gccgttgcca tgtgacggtt gtagggcaltc atccggctca tcatggctt caggcacc algtccatcg ttgtgtcag ttatgggtt atggccaca agatccaca gcaaggcttg attaatgcca gtctgacctt acgggtctc tcttttgc cagcagcctt ttctctgc tggccocat atcagggtgtt gggccctata gccacagtc gaatccgiga gttatgcaa ggcaltgaca aagaatggg tatgacgfg gatgagaca gfgccctggc cttctcaac agctgctca acccaltgt ctatgctc alggggcagg actccggga gaggctgac cagcccttc ccgaccgtc ggagggggcc ctgaccgag acicaacca aaccagtgac acagctacca atttactt acctctgca gagggtggagt tacaggcaaa gtagggaggg agctggggga cacttccgag ctccagctc cagctctgc tcaacttgag ttaggctgag cacaggcatt tctgtctat ttaggatta cccactcacc agaaaaaaa aaaaaagctt ttgtgtccc tgaattgggg agaataaca gatatggtt t</p>	P	Homo sapiens
632	190824	Formyl Peptide Receptor-like 2	NM_002030	<p>MEITNSSLPIN ISGTPAVSA GYLFDIITY LVFAVTFVLG VLGNGLVIVW AGFRMTHIVT TISYLNLA VA DFCFTSLPF FMVRKAMGGH WPFGWFLCKF VFTIVDINLF GSVFLIALIA LDRCVCVLP HP VWTQNHRTVS LAKKVIIGPW VMALLTLPV IIRVTVPGK TGTVACTFNF SPWINDPKER INVA VAMLTV RGHIFIGF SAPMSIVAS YGLIA TKHK QGLIKSSRP RLVSFAAAF FLCWSPYQVV ALIA TVRRE LLOGMYKEIG IAVDVTALA FFNSCLNPM L YVFMGQDFRE RLIHALPASL ERALTEDSTQ TSDTATNSTL PSAEVELQAK alggaaaa accctccat tctctgaat gaaactgagg aggtgtccc tgaactgtt gggcacaccg ttctgtgat ctctcatg ctagtcacg gatgcacctt tgtctcggg gtcttgggca atgggtgtt gatctgggfg gcttgattcc ggaatgacg</p>	A	Homo sapiens

(FPR2)

633 190824 Formyl Peptide NP_002021.2 Homo sapiens
Receptor-like 2 (FPR2)

cacagicaac accatcgt acctgaacct gggccctagct gacttctct tcaagtgccat cctaccattc cgaatggctct cagtcgccat
gagagaaaaa tggcccttgg cgtcattctt algtaaagta gttcaagta tgaatagac caacatggtt gtcagtgctct accatgacac
catcattgct ctaggacgct gtaattgct cctgatacca ggcctggccc agaaccatcgc caccatgagt ctggccaaga
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calactgta ttcaactt gcatctggg gtagacatcgc tgaagagagg tgaacgtgtt tcatcaccat gggccaaggc ttctgatcc
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tggcagctcgc gctcaaaagag algtgttaa atgggcaata caaatcatt ctgttcctga ttaaccaac aagctccttg gcttttita
acagctgctt caaccaat ctiacgtct ttagggcgc taaactccaa gaaagactga ttgccttt gcccactagt ttggagaggg
ccctgactga ggtccctgac tcaagccaga ccagcaaac acacaccact tctgttcac ctctgaggga gacggaggtta
caagcaatgt ga

634 190948 EMR2 Hormone NM_013447 Homo sapiens
Receptor

cggagagagg acagccctgt cccactcact cttccctcgc cgtctctcgc cggcagctca gctgggaacca tgggagggccg
cgtcttctc gcttctcgc cactcgtgt cgtgcgtgact ctggcgggag ctggaaccca ggaactccagg ggcctgtgccc
gggtgtgccc tcaaggactcc tctgtgtgta atgccaacgc cgtctgctgc aatccagggtt tcaagctctt ttctgagatc
atcaccacc ccaaggagac ttgtgacgac atcaacgagt gtagcaacat gtagcaaggtt tcatgctggaa aattctggga
ctgtctgggaac acagaggggga gctacgactgc cgtgtgtcagc ccaggtatag agctctgttc tgggggcaaaa acattcaaga
atggagagcga gaaacaggtt caagatgtgtt acgaaatgca gcaaggaacca agctctgtta aaagctacgag cactcgtcgc
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gaaatgaatgc accctccggac aaaaaccatg ccacagctcc accacatg tcaacaacgt gggcagctat caggtgcccgt
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tctgcccgtg caocacatg agcagcttgc ccgtctcat gggccactac gtagtcagg agggaggtacc cgtgtgtgt
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 ttataaca cgtctctt tcatctac

Homo sapiens

P

MGGRVFLVFL AFCVWLTLPG AETQDSRGCA RWCPQSSCV NATACRCNPG
 FSSFSEIIT PMETCDDINE CATLSKVSCG KFSDCWNTG SYDCVCSGY
 EPVSGAKTFK NESENTQDV DECOQNRLC KSYGTCVNTL GSYTCQCLPG
 FKLKPEDPKL CTDVNECTSG QNPCHSSTHC LNNVGSYQCR CRPGWQPIPG
 SPNGPNTVC EDVDECSGQ HQCDSTVCF NTVGSYSRCR RPYWKPRHGI
 PNNQKDVCE DMTFTSTWTP PGVHSQTLR FFDKVQDLGR DYKPGLANNT
 IQSILQALDE LLEAPGDLET LPRLQHCVA SHLLDGLDV LRGLSKNLSN
 GLLNFSYPAG TELSLEVQKQ VDRSVTLRQN QAVMQLDWNQ AQKSGDPGPS
 VVGLVSPGM GKLLAEAPLV LEPEKQMLH ETHQGLLDG SPILLSDVIS
 AFLSNNDTQN LSSPVTFHS HRSVIPRQKV LCVFWEHGQN CGGHWATTGC
 STIGTRDTST ICRCTHLSF AVLMAHYDVQ EEDPVLTVIT YMGLSVSLLC
 LLLAALTELL CKAIONTSTS LHLQLSLCLF LAHLFLVAI DQTGHKVLCS
 IIAGTLHYLY LATFTWMLE ALYLFTARN LTVVNYSSIN RFMKKLMFPV
 GYGVPVTVVA ISAA SRPHLY GTPSRCWLQPEKGFVWGLG PVCAIFSUNL
 VLFLVTLWIL KNRLSSLNSE VSTLRNTRML AFKATAQLFI LGCTWCLGIL
 QVGPAAARVMA YLFTIINSLO GVFIYVYCL LSQQVREQYG KWSKGIRKLK
 TESEMHITLSS SAKADTSKPS TVN

Homo sapiens

A

gcattctc cactccgt gggcgagg agccctctc gaactcag ttcagtct gctggggtt cggccatt ttctatc
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635 190948 EMR2 Hormone Receptor NP_038475.1

636 190955 Leukotriene B4 Receptor BLT1 NM_000752

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 gaggagaga tggagcaag tggggcga gtagagcgt gctcagct ggtccaca ggcagctta accataaa
 clgaagctg aa

P Homo sapiens

NP_000743.1

Leukotriene B4 Receptor BLT1

637

190955

A Homo

AF380185

Trace Amine

638

191039

atgagcct ttggcaca tataatatt attctctg tgaatacaaa cgggcaaat gatgctgg cttccctgta cagttaag

sapiens

Receptor 1 (TAI)

ggctcatalaa ttctgaccac actcgttggc aatctgatalg ttattgttc tatalcacac ttacaacaac ttacalaccc aacaaattgg
ctcaltcatt ccaltggccac tggggacttt cttctgggggt gctgggcat gcttaccatg atgggtgagat ctgctgagca cttgttgat
ttggagagag tctctgialaa aattcacaca agcacccgaca ttatgctgag ctgagctcc attuccatt tgccttcat cttcattgac
cgtactatg ctgctgctg tccatgagaa ataaagacca agatgaaat ctgggtatt tgggtgagaa ttctctatg ttgggtgctg
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tccaaaaa ttatocagg tgaatatt tttagaatt gattcatag

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Trace Amine Receptor 1 (TAI)

MMPFCHNIIN ISCVKNWNSN DVRASLYSLM VLJLTLVG NLIVIVSISH
FKQLHTPTNW LHSMATVDF LLGCLVMPYS MVRSAEHCWY FGEVFCIKHT
STDIMLSSAS IFHLSFISID RYAYAVCDPLR YKAKMNILVI CVMFISWSV PA VFAFGMIF
LELNFKGAE IYKYKHVHCRG GCSVFFSKIS GVLTFMTSFY IPGSIMLCVY
YRIYLIAKEQ ARLISDANQK LQIGLEMKNG ISQSKERKAV KTLGIVMGVF
LICWCPFFIC TVMDPFLHYI IPPTLNDVLI WFGYLNSTFN PMVYAFFYPW
FRKALKMMLF GKIFQKDSR CKLFLELSS

Homo sapiens

G Protein-Coupled Receptor 88 (GPR88)

gggttccaca ttagccacca cttctgttc ttagcacagg gttgtctct ctgagctca gctctgatt ttgagccaa gcatcttgc
tgcctgctcc tgcctgcca cccgctggg ctgagagccc gccatttacc ttctccag cctgatacca gctgagaaat
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P Homo sapiens

A Homo sapiens

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 taataagt cagaaaaaaa aaaaaaaa aaaaaaaa aaaaaa
 MTNSSSTSTS STTGGSSLLL CEEESWAGR RRPVSLLYSG LAIGGTLANG
 MVYLVSFR KLQTSNAFI VNGCAADLSV CALWMPQEA V LGLLPTGSAE
 PPADWDGAGG SYRLRGGLL GLGLTVSLLS HCLVALNRYL LITRAPATYQ
 ALYQRRHTAG MLALSWALAL GLVLLPPWA PRPGAAPPRI HYPALLAAAA
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 QHAPGPGGAA HPAQAQPLPP ALHPRRAQRR LSGLSVLLC CVFLLATQPL
 VVVSLSGFS LPVPWGVHAA SWLLCCALSA LNPLLYTWRN EEFRRSVRSV
 LPGVGDAAAA AVAATAVPAV SQAQLGTRAA GQHW
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641 191132 G Protein-
Coupled Receptor
88 (GPR88) NP_071332.1

642 191168 P2Y12 Platelet
ADP Receptor NM_022788

643	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	<p>ataggaaaa agaacaggat ggtgggacc caaatgaaga gactccaalg taacazaat aactaaggaa alatticaat ctcttgggt tcaagaactg ttaagcaaa ggciaaagta aaaaatttaa ctagcaaga agcaactaag ttaalaata tgacltaaa gaacagaag attacaaag caatttcat ttaccttcc agtaagaata gctatctaa aataagaata actaatctaa acttagcig tattagcagc aaaaacaacg ac</p> <p>MQAVDNL TSA PGNTSLCTRD YKIQVLFLPL L YTVLFFVGL ITNGLAMRIF P Homo sapiens FQIRSKSNFI IFLKNTVISD LLMILTFPEK ILSDAKLGTG PLRTFVCQVT SVIFYFIMYI SISFLGLITI DRYQKTRPF KTSNPKNLLG AKILSVIWA FMELSLPNM ILTNRQPRDK NVKKCSFLKS EFGLVWHEIV NYICQVIFWI NFLIVIVCYT LITKELYRSY VRTRGVGKVP RKKVNVK VFI IIAVFFICFV PFHFARIPYT LSQTRDVFDC TAENTLFYVK ESTLWLSN ACLDPFIYFF LCKSFRNSLI SMLKCPNSAT SLSQDNRKKE QDGGDPNEET PM</p>
644	191193	Trace Amine Receptor 3 (TA3)	AF380189	<p>aiggigaata attitccca agctagggt gggagcgtgt gtiacaagaa cgtgaacgaa tcttgcatia aaactccila A Homo sapiens cicgccaggt cctcgatcta tctciacgc cgtcttgggt ttggggcig tgcctggcagc gtttggaaac ttacttgctat tgaatgctat ccttcacttc aaacaactgc acacacacac aaacttcig attgcgcgc tggccctgicg tgaacttcig ggggagctca cgtgagcgc cttcagcaca gggaggcig tggagagcig tiggacttt ggggacagtt acgtaaaati ccalacatgt ttgacacat cctctgttt tgcctcttia tticattat gctgatacic tgttgalaga tacaatgicg ttactgatcc tctgacatc ccaaccaagt ttacttgicg agtticaggg atatgcalig tctttcig gttctttct gtcacalaca gcttttcag cttttacag cgggccaacg aagaagggaat tgaaggaaia gtagtgcic taacttggt agggagcgc caggctccac tgaalcaaaa cggggccta cttgtttic ttctatctt talaccaat gtcgccalg tgttialala cagtaagaia tttttgggg ccaagcatca ggctagggaag atagaaagta cagccagcca agcicagc tctcagaga gtiacaagaa aagaagtagca aaaaagagaga gaaaggcgc caaaacttg ggaaatgcta tggcagcatt tctgtctct tggcaccat accctgtga tgcagtgatt gatgttata tgaattttat aactctcct tatgtttatg agattttatg tigggtgtgt tattataati cagctatgaa ccocttgatt tctgtctt ttaccaatg gtttgggaag gcaataaaac ttatgaag oggcaaggc ttaaggagc attgcgaac aactaatia ttitcgaag aagtagagac agattaa MVNNFSQAEA VELCYKNVNE SCKTPYSPG PRSILYAVLG FGAVLAAFGN P Homo sapiens LLVMIALHF KQLHTPTNFI IASLACADFL VGVTVMPFST VRSVESCWYF GDSYCKFHTC FDTSCFASL FHLCCISVDR YIAVTDPLTY PTKFTVSVSG ICIVLSWFFS VTYSFSIFYT GANEEGIEEL VVALTCVGGC QAPLNQNWVL LCFLFFIPN VAMVFYYSKI FLVAKHQARK IESTASQAQS SSESYKERVVA KRERKAAKTL GIAMAAFLVS WLPYLVDVI DAYMNFITPP YVVEILVWCV YYNSAMNPLI YAFFYQWFGK AIKLIVSGKV LRIDSSTTNL FSEEVETD</p>
645	191193	Trace Amine Receptor 3 (TA3)	AAK71240.1	<p>algaalgagc cactagata tttagcaaat gctctgatt tcccgatga tgcagcgtct ttgggaat gactgatga aaacalocca A Homo sapiens ctcaagatgc actactccc tgrttattt ggcatattct tctcgtggg atttcaggc aatgcagtag tgalatccac ttactttic aaaatgagac ctgggaag cagcaacatc attatgctga accctggcgc cagatagcig cgtatctga ccagcctccc cttctgatt cactatg ccagtgga aactggatc ttggagatt tcaitrgtaa gttatccgc ttacgtccc atttcaact gtatagcagc altctctcc taccgttt cagcatctc cgtactgic tgalcatca ccaatgagc tgcittcca ttcaaaaac tcatgtgca gttttagcct gtcgtgtgt gtagatcatt tcatgttag cgtctacc galgacttc ttgalcatc caaccaacag gaaccaaga tcaagcctgc tgaactcac cagttcggat gaacicaala ctataagtg gtiacaacig atttgacg caactactt ctgctctccc tigtgtalag tgacacttg clatacacg attalocaca ctctgocaa tggactgcaa actgacagc gcttaagca gaaagcacga aggttaacca ttctgclact ccttgatct ttactatgt tttaccott ccalatctg aggtctalc ggtatgaic tgcctgctt tcaatcagtt gttcattga gaatcagatc calgaagctt acalgcttc tagaccatta gctgctctga acaccttgg</p>
646	191196	G Protein- Coupled Receptor GPR80	AF411109	

647	191196	G Protein-Coupled Receptor GPR80	CAC51133.1	taacctgtta ctataltgg tggcagcga caactttcag caggctgtct gctcaacagt gagatgcaaa gtaagcggga accttgaga agcaagaata allgttact caacaaccc ttga MNEPLDYLAN ASDFPDYAAA FGNCTDENIP LKMHYLPVY GIIFLVGFPG NAVVISTYF KMRPWKSSSTI MLNLACTDL LYLTSPLFI HYYASGENWI FGDFMCKFIR FSFHNLYSS ILFLTCSIF RYCVIHPMS CFSHKTRCA VVACAVVWII SLVAVPMTF LITSTNRTNR SACLDTSSD ELNTIKWYNL ILTATTFCLP LVIVTLCYTT IHTLTHGLQ TDSCLKQKAR RLTIILLAF YVCFLPHIL RVRIESRL SISCSENQI HEAYVSGPL AALNTFGNLL LYVVVSDNFQ QAVCSTVRCK VSGNLEQAKK ISYSNNP tccctggccc ttaataaag actaatc ttaagcctc tgaattcct tctgtiaaaa cagggcggtt aattacaca taacagcgtg gcalgaataa tcaatgaaca tgcagcaggt gctcaagtct tgttttgt tcaaggcgca cagatggagg ttctlgagc alggatccaa ccaccggc cgggggaaca gaaggaaca cagtgaaagg aatgaacca gccctcttc tgccttgagg caaggagacc cigatccgg tctctgat cctttcatt gccctggctg ggcctggagg aaaggggtt gctctggc tctgggctt cggcaltggc aggaaagct tctgtcia cgtctcagc ctggccgggg ccgacttct cttctctgc tccagatta taatlgcct ggtgtacct agtactct tcttccat cttcaaat tccctagct tctcaccac tggatgacc tggcttacc ttgcaggcct gagcaltgctg agcaccgtca gcaccagcg ctgcctgct gccctggc ccatlggta tgcctggc ccgcccgag accgtctcagc ggctgtgtgt gctctctt gggccctgct cctactgct agcaltctgg aaagggaagt ctgtggcttc ttatttggtg altgtgact tgggtgtgt cagacattg alttcaac tgcagcgtgg ctgatttt taltactgt tctctgggg tccagctgg cctgctggt caggatcttc tgggttcca ggggtctgct acigaccagg ctgtactga ccatctgct cacagctgctg ggttctctc tctgggctt gccctggc altcaggtt tctaatat altgaltctgg aaggaltctg altgttatt ttgtcattt calccagttt cagttgctt gtcactt aacagcgtg ccaacccat catttact tctggggct ctttaggaa gcagtgccgg ctgcagcagc cgatctcaa gctggctc cagagggtc tgcaggacat tgcctgggtg gatacagtg aaggaltctt ccgtcagggc acccggaga tgcgagaag cagctgggtg tagagaaga cagcctctac tttccatga taltgtggc ttgtggaggc aacttgcc ctgtctgt gattgtcta acttctcag tctgattt aaacagta agagagctt tggaggatt aagtgagaca MDPTTPAWGT ESTTVNGNDQ ALLLLCGKET LIPVFLIFI ALVGLVGNFG VLWLLGFRMR RNAFSVYVLS LAGADFLFC FQIINCLVYL SNFFCSISIN FPSFFTVM T CAYLAGLSML STVSTERCLS VLWPIWYRCR RPRHLSAVVC VLLWALSLLL SILEGKFCGF LFSGDGSGWC QTDFDITAAW LFLFMVLCG SSLALLVRIL CGSRGLPLTR LYLTLTLTVL VFLLCGLPFG IQWFLILWIW KDSDVLFCHI HPVSVVLSL NSSANPIIYF FVGSFRKQWR LQQPILKLAL QRALQDIAEV DHSEGCFRQG TPEMSRSLV tcataactt gacatttt ttggaggcaa agttttgat acacttggtt catttccct gcatatgtgt gcaaatgctt ggtcctgaag altttgtt ttctggcagg ttgcagctt gccactagag ctgggattgg tcatgtgac attgccgctc altgggtcca gtagagcagg actcaggcgca altgtctca cactatggga agaatacgt tagatcatct tgaanaaggc agacttggt ttaactct gcttaacaat aataacalag catttgaggga tgaatgtgca alacaggatt ccalgttag atattaat gacaataic tccacagctg gtacalatt ggcaaatgt gtagcataga tagggalgaa tggatccaa gctatccaa aatgtgagat gccaaalgta altgaattgg cttattgtia atttcalat ttgccttga aagcaaat gaaagcaaat gaaagccaggga tggcaalgta gcccgagcatg gtggcaaat caagtatga tcccttca cactocagg tgaactct gggcaaggag acalttacct ctacagtagg tctgcaag attagcaga gtgtcaaat gacaactgg altgccgtg aagtgagat aataaggat ctacagtagg ggcactttag aatttctgt aatttggt caagctgaa ggttagcaa attttaga acttctgcaa aatgcaggag atgcaaggaa taaagctac tcaacatt gctctgctgg tttaactgt gtagtctgtt ggttcttcaa tgaanaagct cgtgtgga	P	Homo sapiens
648	191218	MrgX2 G Protein-Coupled Receptor	AY042214		A	Homo sapiens
649	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1		P	Homo sapiens
650	191222	G Protein-Coupled Receptor Ls191222	LG94359		A	Homo sapiens

651	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199 719	QTLAMIHSIE MINNSTLLPG VKLGYEYIDT CTEVTVAMAA TLRFLSKFNC SRETVEFKCD YSSYMPRVKA VIGSGYSEIT MAVSRMLNLQ LMPQVGYEST AEILSDKIRF PSFLRTVPSD FHQIKAMAH L IQKSGWNWIG IITDDDDYGR LALNTFIIQA EANNVCI AFK EVLPAFLSDN TIEVRINRTL KKIIEAQVN VVVFRLRQFH VFDLFNKALIE MNINKMWIAS DNWSTATKIT TIPNVKKIGK VVGFAFRNGN ISSFHSFLQN LHLLPSDSHK LLHEYAMHLS ACAYVKDIDL RLHLSIQLAV FALGYAIRDL CQARDCQNP AFQPWELLGV LKNVFTIDGW NSFHFDAGHD LNTGYDVVLW KEINGHMTVT KMAEYDLQND VFIPDQETK NEFRNLKQIQ SKCSKECSPG QMKKTTRSQH ICCYEQNCNCP ENHYTNQ TDM PHCLLCNNKT HWAPVRSTMC FEKEVEYLNW NDSLAILLI LSLGII FVL VVGII FTRNL NTPVVKSSGG LRVCYVILL C HFLNFASTSF FIGEPQDFTC KTRQTMFGVS FTLCISCILT KSLKILLAFS FDPKLQKFLK CLYRPILJIF TCTGIQVVIC TLWLFAAPT VEVNVSLPRV IILECEEESI LAFGTMGLGYI AILAFICFIF AFKGYENYN EAKFITFGML IYFIAWITFI PIYATTFGKY VPAVEIIVIL ISNYGILYCT FIPKCYVIIC KQEINTKSAF LKMIYSYSSH SVSSI	P	Homo sapiens
652	193511	EGF-Like Module-Containing Mucin-Like Receptor EMR3	NM_032571	tttttgag taggaaggt ggttgctta cggcagatga gagagcttcc agggctggct ggcgtgggat accgtiaca cagaatlgca gggaccatlg ctcttcag gctctgcti tctgctgag ctcttgag cigtgactca gaaacacaa acttctgtg ctaagtgcc ccaaalgt tctgtgtca ataacitca ctgcactgc aacatlgat atactctgg atctgggcag aaactitca calltccct ggagacatgt aacgcattat algaatlgac accacat at agtlatat gteggattaa cgtctgtgt lacaatgtc agagaagttt ctactgtcaa tgtgtccag gatatagact gcattctggg aalgaaacat lcatlaaltc caatlgaaac accgtcagg acaccctc ctcaagaca accgagggca ggaagagct gcaaaagatt gteggacaaat ttgagtact tctaccaat cagactttat ggagacaga agggagacaa gaaatctat ccacagctac cactatctc cgggagtgg aatcgaaagt tctagaaact gcttgaaag atccagaaca aaaaagtctg aaaaacaaa acgatalgtgt agctatgaa actcaagcga ttacagcaa tigtctgaa gaaagaaaga calltcaact gaacgtccaa algaactcaa tggacatccg ttgcagtac atcatccagg gagacaca aggtccagtt gcaatggct tlatctata ttctcttt ggaacacatca taatlgcaac tttttt gaa gagatggata agaaagatca agtlatctg aactctcagg ttgtgagtc tcttcttt ccaaaaagg aactgtctct ctcaagctt gtgacgtga ctttcagca cgtgaagatg accocagta ccaaaaaggt ctctgtgtc tacttggaaaga gcacaggcga gggcagccag tggtcagggt atggctgctt cctgatacac gtgaacaaaga gtacacacat gtgtatgtc agtaccctgt ccagctcgc tgtctgagtg gccctgacca gccaggagga ggaatcccggt ctgactgtca tcaactactg gggcgtgagc gtctctgct cgtgtctct cctggcggcc ctactttc tctgtgtgaa agccatccag aacaccagca cctcactgca tctgcagctc tgcctgtcc tctctggc ccactctc ttctctgtgg ggaatgtatc aactgaacc aagggtgtct gtctccatc cgcgggtgt ttgcactc tcaactggc cgtctgac cgtctgac ttgtgtggc gcaactctc ctactgtcac ggaacctgac agtggtaac tactcaaga tcaatagact calgaatgtg alcatgtcc cagtcggctc tggcgttccc gctgtgactg tggccattc tgcagctccc tggcctcacc ttatggaaac tgcgtatcga tgcgtggctc accgtggacca gggatitcag tggagtccc cgtgcccagt ctgtgcccgt ttctgtcga attaglati gttattgtg ttttggaaag azaacttccc tccctcaata gtgaagtgtc aacatccag aacacaaagg tctggcttt caaagcaaca gctcagctct tcatctggg ctgcacatgg tgtctgggct tgcatacagg tgggtccaggt gcccaaggta tggcctacct ctccacc	A	Homo sapiens

Homo sapiens

P

NP_115960.1

EGF-Like
Module-
Containing
Mucin-Like
Receptor EMR3

193511

653

atcaacagcc tccaagggctt ctctctctc ttggcttact gctctctcag ccagcaggctc cagaacaat atcaaaagt
gtttagagag atcgtaaat caaaatctga gctctagaca tacacactt ccagcaagat gggctctgac tcaaaaccca
gtgaggga tgtttcca ggacaagtga agagaataa taaaactag aatattcaac tccatatgga aatcatatc catggtatc
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MQGPLLLPGL CFLLSLFGAV TQTKTSCAK CPPNASCVNN THCTCNHGYT
SGSGQKLFTF PLETNDINE CTPPSVYCG FNAVYNVEG SFYCQCVPGY
RLHSGNEQFS NSNENTCQDT TSSKTTEGRK ELQKIVDKFE SLLTNQILWR
TEGRQEIST ATTILRDVES KVLETALKDP EQKVLKIQND SVAIETQAIT DNCSEERKTF
NLNVQMNSMD IRCDIIQGD TQGPSAIAFI SYSSLGNIIN ATFFEEMDKK
DQVYLSQV VAAIGPKRNV SLKSVTLTF QHVKMTPTSK KVFCVYWKST
GQGSQWSRDG CFLIHVNKSH TMCNCSHLSS FAVLMALTSQ EEDPVLTVIT
YVGLSVSLC LLLAALTFL CKAQNTSTS LHLQLSLCLF LAHLLFLVGI
DRTEPKVLC IAGALHYLY LAAFTWMLLE GVHLFLIARN LTVVNYSSIN
RLMKWIMFPV GYGVPVAVTVA ISAAWPHLY GTADRCWLHL DQGFMSWFLG
PVCAIFSANL VLFILVFIL KRKLSLSE VSTIQNTRML AFKATAQLFI
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KHAYICLAI WAYASFWTIM PLVGLDYP EPFGTSCTLD WWLAQASVGG
QVFILNLF CLLLPTAVIV FSYVKIAKV KSSSKEVAHF DSRIHSHVL EMKLTKVAML
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agtacaacia ccagagctg gggcggga agaggagc agggcagc ggtgtacgc tgggtgtca ggaacgggac
ggcggcggg ccggggcgt agtactcgt ctggcggcac tcatgaacag ccgtctcgt ggtgtgtca gcalcggcc

Homo sapiens

P

CAC21687.1

G Protein-
Coupled Receptor
d1402H5.1

193516

654

Homo sapiens

A

NM_001407

Cadherin EGF
LAG Seven-Pass
G-Type Receptor
3 (CELSR3)

193524

655

656	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	<p>gcaaaaggag cagaacaag ggaattcaag accagaatg taggtgccac tgcctctat gttacagga tccctcgagg ccctaggcac clggcgta ggaagtact ccgtccact cctcttlat tccitaata agggaaaaat gactgtacg accgtgtca caaaactt actttgtc tttgtcgc tgcagaac gaagactt aaaaattgt tactgttac aagtcagat tcaaaaaag ttttactt gttacaact caaaacttg agttttac tttgttaca gtatataat tttttctt ttttccaag tgaaggtag ggaagtggg agaaggact ggaaggacca cclgtgagga cclgtacgtt gccatctga ggggtttct aaccocagg tctocaggc cgaaggtag cclgtgagc cgtttacag cagatccaga agaccttgag agtaggcgtc ctataaccac gggggagagt ggcgtgtag ggcgtggggg tggcgtgag agacacccc tcaaccacca cccatgcat actctggga agcagctcc tgggagatga gaaattctac ttcctgact ggaagcctt cccaccagcc aggaacaaa ctctctiac cgagaaggac ccagctctt gaagggtga gggcctgct ggggggggga ggggtgctt actatgctt aggtttgta galgccctc tclggggtc cctctcca gccagcggc cctcttct gtcgtgtaa atgttcgtt gaagccggc tctgttgg gaataaact ctatagaaa caaaa</p> <p>MMARRPPWRG LGERSTPILL LLLSLFPLS QEELGGGGHQ GWDPLAATT GPRAHIGGGA LALCPSSGV REDGGPGLGV REPFGVLRG RRQSARNRG PPEQNEELG IEHGVQPLGS RERETGQPG SVLYWRPEVS SCRTGGLQR GSLSPGALSS GVPGGNSP LPDFLIRHH GPKPVSSQRN AGTGRKRVG TARCCGELWA TGSKQGERA TTSGAERTAP RRNCLPGASG SGPELDSAPR TARTAPASGS APRESRTAPE PAPKRMRSRG LFRCRFLPQR PGPRPPGLPA RPEARVTSANRARRRAAN RHPFPQYNY QTLVPENEA GTAVLRVVAQ DPDAGEAGRL VYSLAALMNS RSLELFSIDP QSGLIRTA AAA LDRESMERHY LRVTAQDHGS PRLSATTMVA VTVADRNDHS PVFEQAQYRE TLRENVEEGY PILQLRATDG DAPPNANLRY RFVGPAAARA AAAAFAEIDP RSGLISTSGR VDREHMESE LVVEASDQOQ EPGPRSATVR VHTVLDEND NAFQSEKRY VAQVREDVRP HTVVRVTAT DRDKDANGLV HYNISGNSR GHFAIDSLTG EIQVVAPLDF EAEREYALRI RAQDAGRPL SNNTGLASIQ VVDINDHIPI FVSTPFQVSV LENAPLGHVS IHQAVDADH GENARLEYSL TGVA PDTFV INSATGWVSV SGPLDRESVE HYFFGVEARD HGSPPLSASA SVTVTVLDVN DNRPEFTMKE YHLRLNEDAA VGTSVSVTA VDRDANSALS YQITGGNTRN RFAISTQGGV GLVTLALPLD YKQERYFKLV LTASDRALHD HCYVHNITD ANTHRPVFQS AHYSVSVNED RPMGSTIVVI SASDDVGEN ARITYLLEDN LPQFRIDADS GAITLQAPLD YEDQVYTLA ITARDNGIPQ KADTTYVEVM VNDVNDNAQ FVASHYTGLV SEDAPPFTSV LQISATDRDA HANGRVQYTF QNGEDGDGDF TIEPTSGIVR TVRRLDREAV SVYELTAYAV DRGVPLRTP VSIQVMVQDV NDNAPVFAE EFVVRVKENS IVGSVVAQIT AVDPDEGPNH HIMYQIVEGN IPELFQMDIF SGELTALIDL DYEARQEVYI VVQATSAPLV SRATVHVRLV DQNDNSPVLN NFQILFNYYV SNRSDTFPSG IIGRIPAYDP DVSDHLFYSF ERGNELQLLV VNQTSSELRL SRKLDNNRPL VASMLVTVTD GLHSVTAQCV LRVVIITEEL LANSLTVRLE NMWQERFLSP LLGRFLEGVA AVLATPAEDV FIFNIQNDTD VGGTVLNVSF SALAPRGAGA GAAGPWFSS ELQEQLYVRR AALAARSLD VLPFDNNVCL REPCENYMKC VSVLRFDSSA PFLASASTLF RPIQIAGLR CRCPGFTGD FCETELDLCY SNPCRNNGGAC ARREGGYTCV</p>	P	Homo sapiens
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DTEAGRCV PGVCRNGGTC TDAPNGGFR CQPAGGAFEG
 SSFVMFRG LRQRFHLTSLSFATVQQSG LLFYNGRLNE
 QVRLTYST GESNTVVSPT VPGGLSDGQW HTVHLRYYNK
 PSKDKVAVL SVDDCDVAVA LQFGAEIGNY SCAAAGVQTS
 LGGVNLPEFPVSHKDF IGCMDLHID GRRVDMAAFV
 KLHFCDSGP CKNSGFCSEWGSFSCDCPV GFGGKDCQLT
 TSWNFGSD MAVSPWYLG LAFRIRATQG VLMQVQAGPH
 SVTVTRGS GRASHLLLDQ VTVSDGRWHD LRLELQEEPG
 LDFSLFQDT MAVGSELQGL KVKQLHVGG LPPGSAEEAPQ
 GSTPSGSPA LLPSHRVNA EPGCVVTNAC ASGPCPPHAD
 QPGYYGPG CVDACLNPQ QNQGSCRHLPGAPHGYTCDC
 RMDQQCPRG WWSPTCGPC NCDVHKGFDP NCNKINGQCH
 SCLPCDCY PVGSTSRSCA PHSGQCPCRP GALGRQCNSC
 RVLADACP KSLRSGVWVP QTKFGLATV PCPRGALGAA
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 TGDLWAAL QORAPGGSPG SAGLVRHLEE YAATLARNME
 NIMLSIDR MEHPSSPRGA RRYPRYHSNL FRGQDAWDPH
 SPSEVLPT SSSIENSTTS SVVPPAPPE PEGISIH L VYRTLGGLL
 RLQNPVMN SPVSVAVFH GRNFLRGILE SPISLEFRLL
 WDPPLGLAE QHGVWTARDCELVHRNGSHA RCRSRTGTG
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 LGVAELLFL LGHRTNQL VCTAVAILLH YFFLSTFAWL
 VEPRNVDRG AMRFYHALGW GVPVLLGLA VGLDPEGYGN
 IWSFAGPV VLVMNGTM FLAARTSCS TGQREAKKTS
 VSASWLF GLLA VNHSL AFHYLHAGLC GLQGLAVLL
 WMPACLGRK AAPEEARPAP GLPGAYNNT ALFEESGLIR
 ARSGRTQ DQDSQGRSY LRDNLVRHG SAADHTDHS
 AMFHRDAGA DSDSDSL EEERSLSPS SESEDNGRTR
 SERLLTHP KDVDGNDLLS YWPALGECEA APCALQTWGS
 ANNNQDP ALTSGDETSL GRAQRKGI LKNRLQYPLV
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 ERLEEAPA PVLRLSRPG SQECMDAAPG RLEPKDRGST
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 DPLPSRP LDSLSRSSNS REQDLQVPSR HPSREALGPL POLLRAREDS
 LDILSSIL ASFNSSALSS VQSSSTPLGP HTTATPSATA SVLGPSTPRS
 EVPRSEGH
 cca gctcccaac agcagttggc cctaaagca gaatgggact aacactggag ccaccggc
 t octactatca gcacacctcc cctgtggcgg ccatgtcat tgggctcat ggcctcat tctgtctg
 tgg tctgtcat cgtgtcaag aaccggcata tgcatactg caccaactg tcatctca

A Homo sapiens

658	193914	Neuropeptide FF 1 Receptor	NP_071429.1	<p>accctggctgt cagtgagcctg ctgggtgggca tctctgcal gccacacacc ctgtggagca accctcalcac tgggtggccc ttcgacaatg ccacatgcaa gtagtagcggc ttgggtgcagg gcalgtctgt gtcggcttcc gttttcacac tgggtggccal tgcgtggaa aggttccgct gcatcgtgca cctttccg gagaagctga ccttcgggaa ggcgtcgtc accatcgccg tcatctgggc cctggcgctg ctcalatg gtccctggc cgtcacctg accgtcaccc gtagaggagca ccactcalg gtggagccgc gcaaccgct ctacccttc tactctgt gggaggccctg gcccgagaag ggcatacgca ggggtctacac cactgtct ttctcgaca tctactggc gccgtggcg ctaltgtag tcalgtacg ccgcatcgcg cgcaagctct ggcaggccgc gggcccgcc cccggggcg agtagggctg ggaaccggca gcatcgccg gtagagcgcg cgtgtgtgac atgtgtgca tgggtggct gttctacg ctgtctggc tggcgctg ggcgtgctg ctgtcalg actacgggca gtctagcg cgcatg accgtgtcac cgtctacgc ttcccttgg cgcactggct ggccttct aacagcagcg ccaacccat caltaagg tacttaac agacttcc cggcgctt caggccgct tccggcccg cctctggccg cgccctgg gtagccaca gtagggctac tccgagcgg cggcgggct tctgcacagg cgggtcttgg tgggtgtg ggcaggac tccggctg cctctgagtc gggccctagc agtggggcc caggcccg cgcctcccg ctggggaatg ggcgggtgg taccaggc ttgccagg agggcctgg ctgtccac ctgcccct cacttcacg ctgggatatc tga MEGEPSPPN SSWPLSQNGT NTEATPATNL TFSYYQHTS PVAAMFIVAY ALIFLLCMVG NTLVCFVLK NRHMTVTNM FILNLAVSDL LVGFCMPTT LVDNLITGWP FDNATCKMSG LVQGMSSVS VFTLVAIAVE RFRClVHPFR EKLTLRKALV TIAVIWALAL LIMCPSAVTL TVTREEHFM VDARNRSYPL YSCWEAWPEK GMRRVYTTVL FSHYLAPLA LIVVMYARJA RKLQAPGPA PGEEAADPR ASRRRARVVH MLVMVALFFT LSWLPLWALL LLIDYGQLSA PQLHLVTVYA FPFHWLAFF NSSANPIYG YFENFRRGF QAAFRARLCP RPSGSHKEY SERPGGLLHR RVFVVVRPSD SGLPSESGPS SGAPRPGRLP LRNGRVAHHG LPREGPGCSH LPLTIPAWDI</p>	P	Homo sapiens
659	194319	G Protein- Coupled Receptor FLJ22684	NM_025048	<p>agatactgat attcttct caacagcat aagaatgat tgaaccaca gatactgaa ggaaggctg cctcgatlg tgggtgaag agataaaca ccagtcacag actatgcacc cgaactgctg tgtcagctc aggggaaaaag aagttggag tgcgtggct catcttct ttacctca ctgacggcca cgggtggctc ctgggggaaa atgatgacat caaacaaaa aaagaaacta ttgtgaalaa gaaaaaacat ctggggccag tcaagaata tgcgtgctg ctacaggta cctataga ttccaggag aaaaagatt tgaataatt tctgaagctc ttgaagctc catattatg gtacatggg ctaattagaa ttatcagagc aaaggctacc acagactgca acagctgaa tggagcttg caggtatcc tggtagacag ctacacctgg ttctccct catgcttga tcccagaac tctaccttc acagggctg agcactcca agctgtgaa gtaactca caacctcagc cagagtgca attcttga gagaacaaag atttgggca cttaaaaat taatgaaga ttacaaag acctttga ttatcttct gctatatac ccaaatatg aatgtgaatt gaattcaac ttaaaaaagc atatgaaga attcaaggt ttgagtcgg tcaaggaccc caatttcgaa tgtcactt ctgcccgaag ttggagtgca atgggacat ctaggctcac tgcacacctg caacctctg ctaccgggt caagagatt ccttgcctca gccctcccaag tagctggaa taccggcacc tgcaccaca tccagctaac ttttttga ttttttag agacagggt tcaactgt ggccacatg gtctcaact cctgaacta ggttcccg cgtccctggg ccccaaag ctgggttat acagcagtag caccacatc ggcctagggac cttaaatat gggaagcalt ctcaaaactg tgggtcagtg agtagaacia caaaacaata gcaagttagggc agaaacttga aagaaggcag gtagatagg tgaagtgg tgggaaaaag tgaagggttg gataagggt ttgctgggttg cgaagggttg attttctt tcaagcaacta caggagat galtctcat aattctgagc cagaagtgg gctttgggtg agatattt gcacagataa catgtataca tcalgtica aaaccagta gtcattgtt acagcaata aagaatatt tagtaata aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaaaaa aaa</p>	A	Homo sapiens

660	194319	G Protein- Coupled Receptor FLJ22684	NP_079324.1	MKVGVLWLIS FFTFDGHGG FLGKNDNDIKT KKELIVNKKK HLGPFVEEYQL LLQVTVYRDSK EKRDRLNFKL LKPPLL WSH GLRIIRAKA TTDCNSLNGV LQCTCEDSYT WPPPSCLDPQ NCYLHTAGAL PSCCHLNNL SQSVNFCERT KIWGTFKINE RFTNDLLNSS SATYSKYANG IEIQLKKAYE RIQGFESVQV TQFRMSLLSP KLECNGTI	P	Homo sapiens
661	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NM_030774	atgagttct gcaactcac aacagccacc ttigtctta ttggatccc aggatlagag aaagcccatl tcgggttgg cttcccctc ctttccalgt atgtatggc aatgttggc aactgcaicg tggctctcat cgtaaaggacg gaacgagcc tgcacgctcc gatgacctc ttctctgca tgcitgacg catggacctg gccatacca catccacctc gccaaagac cttgccctt tcgttttga ttcccagag atlagcttg aggcctgtct taccagatg ttcttatc algccctc agccatlgaa tccacalcc tgcctggccat ggccttgac cgtatgtgg ccactlgcca ccactgggc catgctgcag tgcatacaa tacagtaaca gccagatg gcatctggc tgtgtggc ggatccctt tttttccc actgctcig ctaalcaagc ggctggcct ctcacalcc aatgtctci cgcatctta ttgtgtcac caggatlgaa tgaatggc ctaigcagac actttgcca atgttgata tggcttact gccatctgc tggcatggc cgtggacgta atgtcalct cctgtctta ttctgata atagaaagg tcttgaact gcttccaag tcagagcggg ccaaggcct tgaacctgt gtgtacaca ttgtgtgtg actgccttc taigtggc ttatggcct ctagttga caccgttg gaaacagct tcatccatt gtcgtgtg tcatgggtga catctacct ctcgtctc ctagtcaa tccatcalt tatgtgcca aaacaaaca gatcagaaca cgggtgtcgt ctagtcaa gatacgtgt gacaaggact tgcaggcgtt gggaggcaag tga MSSCNFTHAT FVLIGIPGLE KAHFWVGFL LSMYVAMFG NCIVVFIVRT	A	Homo sapiens
662	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	ERSLHAPMYL FLCMLAIDL ALSTSTMPKI LALFWFDSRE ISFEACTLQTM FFIHALSAIE STILLAMAFD RYVAICHPLR HAAVLNNTVT AQGIVAVVR GSLFFFLPLPL LKRLAFCHS NVLSHSCYVH QDVMKLAYAD TLPNVVYGLT ALLVMGVVDV MFISLSYFLI IRTVLQLPSK SERAKAFGTC VSHIGVVLAF YVPLIGLSVV HRFNGSLHPI VRVVMGDIYL LLPVVPINII YGAKTKQIRT RVLAMFKISC DKDLQAVGGK	P	Homo sapiens
663	194743	FLJ14454	NM_032787	actttttca tgtctctt gagtgaagg tgaaggaaat gaaagcagag tatgcacct ttatggag attcaactg catctciag gattagccic aaagttocia aaatataaag acatccalt gacagatcac tgaaggagg actgtttt cgtttttaga atagtctcg attaaactt ttagtcaa agaaagaaga gctagtatt tctacccag ggtgtggtt ggtgttggc ttacacalgg cttctgccc tgcctggaac cttagggtgc tgtgtgtgt cgtgtgtgga ctacigact gcalcatitt gggactgggc atctggaggga ttgtgtcag gatccaaaga ggaatactia ctctccalc aagcacccct acagagttct gcaggaaagg tggaaacctgg gaaatggca gatgtattg tacagaaggag tgaagaaggac tgaagatgac aatgtctaatt ttgtgaaa atagtaccta tatgggtttt acttttgcca gaatoccatg gggacalalt ggaacalct tgcataacatg tggcaaggat actccaalg cgggcaalcc aalggcagtc cgtgtgtgca gtctctct atatggagag alagaattac aaaaagtgac aataggaaat tgcatagaaa atctggaaac cctggaaaag caggtagagg algtcacag accactaat aacatttct ctagaagtoaa gattttaaca tctgatgcca ataaatlaac tgcitgaaac atcactatg ctacgcagt ggttggcagc alattcaaca ctccagaaa tgcctcacct gaggcaaga aggttggcat agtaacagtg agtaactcc tagatggcag tgaagatgt ttcaagag tgcitgtac tgciaatgat galgocctia caacgttat tgaagaaatg gagactatt cctgtctt gggatlaaca tcaagggtg aaactaatal agcaatcacg tcaagaaat tctttcaga aaatggcgtg gggoccttcaa algttcgctt cctgtgcag aaaggagcta gcagtctct agtttctagt tcaacattta tatalacaaa tgtgtgtggc cttaacccag algtcacagac tgaagtcag gcttgcctta atatgagaa aaattacac aagacalgcg gcttctagt ttaacaaat gacaagcti tccatacaa aacttttaca gctaaatcgg attttagtca aaaattatc tcaagcaaaa ctgatgaaa tgaagcaagat cagaagctt cgtttgacat ggtctttagt ccaagtaga accataaaga attcaactc latctctalg cctgtgtctia ttgaattg tcaagaaagg actgggacac atatggcgtt caaaaagaca agggcactga tggattccig cgtgtggcgt gcaacalac tactaattt gctgtatlaa tgaatttcaa aaaggattat caalatcca	A	Homo sapiens

aatcaattga calattatcc aacgttggat ggcacatgic ttttacttggc cttggctcica cagtatait tcaagatgic accaggaag
 tcagaaaaac ctacgtaac tgggttttgg tcaatctg calataalg ttgatttca acctctcti tggtttggga attgaaact
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 ggcgaggct gcgtgtaag atgtataat tctcaggic atgccaac ttacatgaac gcttaggct actggaaac
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 aattctttt acaagtact ataaaggaca caaagagaaa acttaactt ccagaacaaa atgactcctg atgaacatg ttttgggatt
 tctgtatg tattaaact ttgacctctg
 MASCRANWNLRL VLVAVVCGLL TGILGLGIW RIVIRQGRK STSSSTPTE
 FCRNGGTWEN GRCICTEHW GLRCTIANFC ENSTYMGFTF ARIPVGRYGP
 SLQTCGKDTN NAGNPMVRL CSLSYGEIE LQKVTIGNCN ENLEILEKQV
 EDVTAPLNNI SSEVQLTSD ANKLTAEIT SATRVVGQIF NTSRNASPEA
 KKVAIVTVSQ LLDASEDAFQ RVAATANDDA LTTLEQMET YSLSLGNQSV
 VEPNIAQSA NFSENAVGP SNVRFSVQKG ASSLVSSST FIHTNVDGLN
 PDAQTELQVL LNMTKNYTKT CGFVVYQNDK LFQSKTFTAK SDFSQKIIS
 KTDENEQDQS ASVDMVFSPK YNQKEFQLYS YACVYWNLSA KDWDITYGCQK
 DKGTDFGLRC RCNHTTNFAV LMTFKKDYQY PKSLDLSNV GCALSVTGLA
 LTVFQIVTR KVRKTSVTWV LVNLCISMLI FNLLFVFGIE NSKNLQTS
 GDINNIDFDN NDIPRTDTIN IPNPMCTAIA ALLHYFLLVT FTWNALSAQ
 LYLLIRTMK PLPRHFLFI SLIGWGVPAI VVAITVGVY SQNGNPNQWE
 LDYRQEKICW LAIPEPNGVI KSPLLWSFIV PVTILISNV VMFTISIKV LWKNNQNLTS
 TKKVSSMKKI VSTLSVAVVF GITWILAYLM LVNDDSRIV FSYIFCLFNT TQGLQIFLY
 TVRTKVFQSE ASKVLMLLSS IGRKSLPSV TRPRLRVKMY NPLRLPLTH
 ERFRLLETSP STEEITLSES DNAKESI
 cggcccgccg cagggttgc gaggcaccga cgtctctaaa aagagcaga cgcaccogal gctcggatg gatgaagtc
 aaagtcttaa tccctggaaa ggcacgaac aagaatcca ttatgcat ctgttggaa cactctgcc gaacttttaa acaatctctg
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 ggtccacala gttggzalg cttttctat tccaalg gcccaggggg gagatgggt gtttgggggg cctctcga
 ccaatcac atccctggat acttgaaac aattgctg tagtgccalc atgactgtaa tggatggga caggactt gccctcgtcc

Homo sapiens

P

NP_116176.1

FLJ14454

194743

664

Homo sapiens

A

NM_032503

G Protein-Coupled Receptor SLT/MCH2

194745

665

666	194745	G Protein- Coupled Receptor SLT/MCH2	NP_115892.1	<p>aaccatttcg actgacacgt tggagaacaa gglaacagac catccggatc aattggggc ttggggcagc ttctttatc ciggcatcgc cigtctgggt clactcgaag gtcataaat ttaagacgg tgtgagagt tggcttttg attgacatc cctgacgat gtactctgtt alacacttta ttgacgata acaactttt ttccctctt acccttgat ttgggtgctt atatttaatt ttatgctat acttggggaga tgaataacaa gaataaggat gccagatgct gcaatccagc tgaatccaaa cagaragtga tgaagtggac aaagatggg cgggtcgttg tggagtctt tatctgagt gcggccctt atcatgat acaactggg aacttgagc tggaaagoc cacatgggc ttctatggg gttattact ctcactgtt ctagctatg ccagcagcag catlaacct ttcttaca tctgtctgag tggaaattc cagaaacgtc tgcctcaat ccaagaaga ggcactgaga aggaatacaa caatagggga aacactcga aatcacatt ttggaaagt acatggalca ccagtgtct agacatgatt gtacttcta ctggtattat tagaaagggc aggtgtaocg alatgttat gccattctt ctgtgtact tgtgactctt agcagcatgg aagagaagc taacacatga aatacaatga gcttaatalg ctaactgaa aaaaaaaa aaaaaaaa</p> <p>MNPFHASCWN TSAELLNKSU NKEFAYQTAS VVDTVILPSM IGIICSTGLV GNILIVFTII P RSRKKTVDPDI YICNLAVADL VHIVGMPFLI HQWARGGEWV FGGPLCTIIT SLDTCNQFAC SAIMTVMSVD RYFALVQFPR LTRWRTRYKT IRNLGLWAA SFILALPVWV YSKVIKFDG VESCAFDLTS PDDVLWYTYL LTITTFEPL PLILVCYILI LCYTWEMYQQ NKDARCCNPS VPKQXVMKLT KMVLVLVWVF ILSAAPYHVI QLVNLQMEQP TLAIFYVGYL SICLSYASS INPFLYLLS GNFQKRLPQI QRRATEKEIN NMGNTLKSHP</p>	Homo sapiens
667	194756	Chemokine Receptor FKSG80/GPR81	NM_032554	<p>ccacacac aggaoccca tctgggtga tgaagtga cagcagcag ctgggtgagt gctaagctc agataagcat ctgtgccatt gtggggactc cctgggcgc tctgcacccg gacactgct ctgtccccc calgtacaac gggctgtgct gcccacatga eggggacac atctccacgg tgaatggcc gctgctcatt gtggcccttg tctgggcgc actaggcaat ggggcgccc tgtgtgtt ctgtctcac atgaagacct ggaagccacg cactgttac ctttcaat tggccgtggc tgaattocic cttatgact gccgtcctt teggacagac tattactca gactgagaca ctgggctttt ggggacalc cctggcaggt egggtcttc acgttggoca tgaacagggc cgggagcalt ggttctcta cgttggcgc tgcgacagc tattcaaaag tggccaoccc ccaccacgc gtgaacacia tctccacccg ggtggcggct ggcaltcgtct gcacctgtg gggccctggc altcctgggaa cagttaict ttgtctggag aacctctt ggtgcaaga gacggccgc tctgtgaga gttcatcat ggagtcggcc aatggctggc algalcalcat gtccagctg gagtcttta tgcctctgg calcalcta ttgtctct tcaagattgt ttggagctg aggcggaggc agcagctggc cagacaggct cggatgaaga aggcagcccg gticalcag gtgtggcga ttigtical cacatgctac ctgccagcg tctgtctag acttatct cctggagcgg tgcctcgag tgcctcgat cctctgctc atggggccc gcacataacc ctacgttca cctacatga cagcatgctg gatccctgg gatatttt ticaagcccc tctttccca aatctaca caagctcaaa atctgcagc tgaacccaa gcagccagga cactcaaaa cacaaggcc eggagagalg ccaattcga accctggcg caggagtgc atcagtggg caaatgtt ccaagccag tctgagggc aatgggatcc ccaatgtt ggtggcact gaacagcag accaaca ctaggaaga tagagtggg actgaatt aactgtgtc aagggtcgg eggcttga aatgccccc cctttcta ttgaagacg gctctgca calgaactgc atcttcta tctgtcga aatgaattc acacact accittggg gaggctcag tt</p> <p>MYNGSCCRJE GDTISQVMPP LLIVAFVLA LGNGVALCGF CFHMKTWKPS P TVYLFNLAVA DFLMCLPF RTDYLLRRR WAFGDPCR V GLFTLAMNRA GSIVFLTVVA ADRYFKVHP HHAVNTISTR VAAGIVCTLW ALVILGTYYL LLENHLCVQE TAVSCSFIM ESANGWHDIM FQLEFFMPLG ILFCFSKIV WSLRRRQQLA RQARMKATR FIMVVAIVI TCYLPVSAR LYFLWTVPS ACDPSVHGAL HITLSFTYMN SMLDPLVYF SSPSPKFYN KIKICSLKPK</p>	Homo sapiens
668	194756	Chemokine Receptor FKSG80/GPR81	NP_115943.1		Homo sapiens

669	194757	G Protein- Coupled Receptor Ls194757	AL162032	QPGHSKTORP EEMPISNLGR RSCISVANSF QSQSDGQWDP HIVEWH gtcaltggagt gctctgacgg gactctctgg agatcaggag acgttaaggag cacagltgagg ccaccaacag cagcaaccga gtcttctgt actgcgctt cttggacttc agctccggag aagggtcttg gtcgaaccac ggctgtgctg (cacgagagg aaacctaac tactctgt gccgtctgac tcactcacc aacttgcca tctctatgca ggltggtccgg ctggagggtca acattggcat cctcatctgt gtagacagag tcatctaca galtcagcggc gacaactaca agaltccaltgg agacocagat gocctcaagt tgaaggccaa ggcaagtggcc gttgtgtctgc ccactctggg tactctggg gttttggcgg tcttctgt caacgggtgt gctgtgtgtt tccagtacat gtttgccag ctcaactcc tgcagggaact gtctatctt cttttcatt gttctctgaa ttcaggagtg agagccgctt tcaagcacaa aaccaaggct tggctgtctca ctagcagctc cgcgccgac tccaacgcga agoccttcca ctgggacctc altgaatggaga ccgggccagg catggctcc accaagctca gcocttggaga caaggagcagc cacctlgccc accgcgtcga cctgtcagoc gttgtgagccg ggaggctlgcc aaccaggcca ggctgtgctc agaacacac ccccaaaca gaaltgaalgg cccacctt gccaltggag cctctcttg ctgtgtcttg gacaltgggtg ttgtggcccc gagacagctg tctctccctg tgaactggc gttctggagca cactgtcag ccacgagoc tgaatgcccag gccagcgtgg gcoctctgc cttgcatcca cccgtgggt gtagtacttc ctggggggtat tccagggaca cagtggcctg actgtgtg tgccttgag cctctctca tcatcagca tcaagaccag ctagggccagg acactggggc ccgggtcccg agcacaggga gggggaltgc agocctctg ccttgggtgg gcttggggag tcaaggccaa agagggtgtt cagtgtccca cgcacctca gtcaggccga ggcaagctgg ggtgtgtgtg gaaggagcag ctaggtccc agtgtgaa tccactgagt ggtgtggtcc ccacagccgg cgttagcgt gttgtgtgtg tctgtgtgtg gttccagcgt gggtccacct gttgtgtgtg altcagltggg ggocctctgc caagccagc tctgagccgt gggtggagtc gttgtgtgtg caggtgtgtg cgtacctct gcoctgtct tgcgggggtc cctctgtc actgtgaagag cgtctgtggg ccttgggctt gcoctgtgtt gggtggagctt ctgggcatc cgtgtgagt ttgctctt tggacccaa ttggcccta agatggctc cctctgtg tgcagcctc ctgtgtgt cttgggcaac aggaagctgg cgtgtcccg cagtgtctgg tctcaggtg gaagtgtg aggtgttcc agggcactgc ttccocaga ggtctctca tggctcag gactctac agtttctaa tgggtcagacc ccggggcagg tagcacagt cgtctgtct ggtcaccag agaccgact ggtgtgtgtg cccactgacc tgaagaggga gggtgtgtg cagccgtgtg ttctgtgtg agggaaatt altgactcag actcagccc agaggagagtg ggaaltgt taltggacca tgtgtggga tgaactgt gaaacaggt ttgggtatc agaltgaat taagaccca ccgagaglac gggtgtgtg ttalactgt gctgtagca cgtgtgtgt cgtgtgaalg tgggtgaagc altcaaacct ggtttgala ctggaaact ttctttaa actgtgacca tgaattcatt cagccctcc acacccctat gttgtgtg tttaggtg agtttctat ggagcctgtg gcoctgtg agccaccig gtggctct aaltgaact ttccctgt cgtctgtg aggtgtgt ggaacacta tctgtcagcc tctctgtc gggtgggtg ggcagggtg agcagctg cagggtgtg ccttgtct tctgtcaggg gaggccagc ctgtcagcc cactgtccac altgtgacag tggcgggt cctgtgtg gcoctgtc caggtgtg gctgggtcag cgtgtgtg caggtgtg cgtgtgca gtagagagtc caggtgtg taltgtgaa agtccatgt tttagcag cccaggtc cgtgtgacc agaaacagg tcaatggac caggtgtg gactctac agccgtgtg gacactgaa gtagaagac tgaatctca caatgtacac ttggaatt cttctatt agttctat gaaacaaac aggtgtgtg ctactgtg tttaggtg attattgt tttaattgt gctgtgca tctatagc taatgtca agtaagtaa tgaacaaac cgtgtgaa cttgtgtc caatgtgaa aggtcagca cttattat aggtgtg ttgtgtg tgcaggtat ttatgtca tacaattt gggtgaaat aggtgtg aaggtgtg altgtgtg taltgtgaa gaaggtgt gactgtat tgtgtgtt tttagaat aaactgtg cctgtgaa aaa	A	Homo sapiens
670	194757	G Protein- Coupled Receptor Ls194757	CAB82385.1	HGVSARDVLE SRTRKQHEA TNSSNRVFVY CAFLDFSGE GVWSNHGAL TRGNLTYSVC RCTHLTNFAI LMQVVPLEVN IGILIAVTRV ISQISADNYK IHGDPSAFKL TAKAVAVLLP ILGTSWVFGV LAVNGCAVVF QYMFATLNSL	P	Homo sapiens

671	194858	G Protein- Coupled Receptor LS194858	LG94710	QQLFIFLHC LLNSEVRAAF KHKTKVWSLT SSSARTSNAK PFHSDLMNGT RPGMASTKLS PWDKSSSAH RVDLSAV	A	Homo sapiens
672	194858	G Protein- Coupled Receptor LS194858	ENSP00000053	ttagtcaag tcaaggctga cactgttgg gctgtgtggg tggtaggcaa tgcgtggggcc gggactgtcc cgggaggctc ttcccacag cccctgcagg cactttggg cggctgccc ctagggggct ggttagcgt gctgcgccag cccatggct acggggcactg ccgtctgcact ggcacttct agggagaggga gggacacag tgtccagggc cccagtggtgg ggcgtgctc ataggccagg actgagaggga gcaagtgtggc cacttagggc cccagcaca gcccggaagag cagcatggct ctagcctgtg ccctgtcctg cctccaggta agggccggg ccaggggcgga gggctcactg cggcacactg cccgtccag ccggcagalg tctgtcagct ggcgggtggg agtggccagc acgceagacag agaggaaggc agcagcacc acggcggggca gcaaggagccc atagacttg aggtacaggt agggggctgg gaagagagcc tgggagctg agtggcacc aggggtccag tggttcaccc ccagagcggg cagactggca aagagcaggg gaaccagcca ggttagggc agggccagc gaatgctcc agggggctgg agtgggctca ggaactgcat gtagcctcc ccgtgcacca gcaagaggtt ggcagcagg gtagaggaagg agaagtggg agocaaagtag acgaggaggc aggaacagta acccgggcga cctgttcc acagccctgg gggctgcgca ggcggcgagc ccgttagagcag ccagccagc agtagggctca ggaagaaagca gccagcagg gggctgcgca ggcggcgagc ccaggcagtg ccaggggcta ggaagcaggt cgcggtagtg atgagcctg ccaggccag ggaagagccc aaagccccc tgggaatggg gctggggacc tgcagctgc tgtgggctg cactgtgc ctggggacag gggagctctg gaggcagc cggcatgc QDTRHGNRC RAGCSNSLT LKQAQAQAP APNSHACRLP LQDSPVPRTK	P	Homo sapiens
673	194878	MrgX3 G Protein-Coupled Receptor	AY042215	MTPNSTGEVP SPIPKGALGL SLALSLIT ANLLALGIA GTAACAATCW LLLPEPTAGW AAHSGIATL PGLWNQSRG YWSCLLVYLA PNFSLSLA NLLLVHGERY MAVRLPLQPP GSRLALLT WAGPLLFASL PALGWNHWTP GANCSSQAIF PAPLYLEVY GLLLPVAVGAA AFLSVRLAT AHRQLQDICR LERA VCRDEP SALARALTWR QARAQAGAML LFGLCWGPVY ATLLSVLAY EQRPPLPGT LLSLLSGSA SAAAVPVAMG LGDQRYTAPW RQPKGACRG CGEPPGTVP APALPTTQAA KAVSTWT	A	Homo sapiens
				tcaaggccag gataagtaa tcaagggtc cagagcactg gctagatgag tgggggggtt ttgatccaa tgtatcccc atgttagcac agaaactgtg tggcagtaga gaaagggtcag gcttagaggt cagcaagaaac tggatttcaa actggatttg aggaccccca cctttgata ggttagctat tctgttagg tctctgact gcccttta aatgaggaag taaatccac atggcagggt ggtagggga aatcagaaac atacagcttg tgaacaaac tggtttgt ttccagggtc accagactgg ggtttctgag cattggattca accatccag tctgggtac agaaactgaca ccaatcaacg gacgttagga gactcctgc tacaagcaga cccttagctt cagggggctg acgtgcatcg ttccctgt cgcgtgaca ggaagacggcg ttgtgtctg gctctggggc tggccgcatg gcaaggaaagc tgtctccalc lacatctca accgtgtcgc ggcgggactt ccttctta ggcggccacat tatagttcg ccgttagccc tcatcaat ccggccatccc atctcaaaa tcttagagcc tggtagagcc ttccctact ttataggct aagcagctg agcgccatca gcaacggagc cgtcccttcc atctgtggc ccatctggta ccactggccg cgcggccagat accgtgcatc ggtagctgt gctctgctt gggccctgt cctgtgcggc agtaactgg agtggaggtt ctggacttc cgttttagtg ggtgtgattc tgtttgtgt gaaacgtcag attcattac aatcgcgtgg ctgggttt ttgtgtgtgt tctgtgtgg tccagccctg tccgtgtgt caggattctc tgtgatatcc ggaagatgcc gctgacccagg ctgtacgtga ccatcctc cacaagtctg gctctctcc tctgtggcc tgccttggc attcagtggg cctgttgc cagggalccac ctggatagga aagcttatt ttgtcagtg catctagtt ccatttctt gtcgtctt aaacagctg ccaaccccat catttact ttggtgggt ccttagggca gcttcaaat aggcagaacc tgaagctgt tctccagagg gctgtgcagg acagccctga ggtgtgagga ggtgtgggggt ggttcttca ggaagccctg gagctgtcgg gaaagcagtt ggaagcagtt ggaagaaacct ctggccctg agcaagagact ttgagagagcaa tgcgtccctg ccacccctga caattatg cattttct agcccttctg ctcaagaaat		

674	194878	MrgX3 G Protein-Coupled Receptor	AAK91806.1	MDSTIPVLGT ELTPINGREE TPCYKQILSF TGLTCIVSLV ALTGNAVVLW LLGCRMRRNA VSIYILNLVA ADFLFLSGHI ICSPLRLINI RHPISKILSP VMTPFYFIGL SMLSIASTER CLSILWPIWY HCRPRYLSS VMCVLLWALS LLRSILEWMF CDFLFSGADS VWCETSDFIT IAWLVFLCVV LCGSSLVLLV RILCGSRKMP LTRLVYVITLL TVLVFLCGL PFIQWALFS RIHLDWKVLF CHVHLVSIFL SALNSSANPI IYFFVGSFRQ RQNRQNLKLV LQRALQDTPV VDEGGGWLPQ ETELSGSRL EQ	P	Homo sapiens
675	194903	G Protein- Coupled Receptor GPCRB3	LG100657	tcagggtggag ccgcagagcc logtggtagc ctagatggag gccctggaaagt gctctggtgt gtggagggtt ggccggcaga ggatcacgta gcacttaggc agaaataacc caccgaagcc gctgctcagg ctgctcagcc cagccatcat gttggccgca ggcaggtaact tgcctgctgta gacgctggcc ggggtggaaga agggcgaacca ggacacgaaag ttgaaagagca ggcctgaaggt gacacattg gccctggtgt agtctctg caagtcccta cccaggtagc tgcagggcaaa ggacatgalt ggagaggagc cattgtgag gagggccagt algaagccca gggaagtgtt gctctggcac tcaagcatca ccagatgggg gaaagcgcgtg taftccctag caggcagtg gggtcacacc accagcccaag ttgagacat aagcagctgg ccgcctggagc lgalcatc aaacaggcca gcacccgtgt ttggaccga ggccgtggtag aaltgtggta ccttgggga aaacttgaa agatgaltta gttggagatga gcgaaactg aggcagggaca ggaagatgtt gaaaccaaagg gcacaaagggg cctggcgtg caagcacgca ggccttgggt gttcccaaa gaagccatag aggtctggcac taactctg cagggtggcc agcalaaaga agcacaggcc ggccctgt gaccitacca cagggggtg taggtggcag gcacaaaggcc cagcagctcc aagcagcagc agcagcagca ggctgttagc tgcagcagc acccaagagg tggctcagc caaagccaaa aaacaccagc tgcgcgggggaa gcaggctgg cttccctcag gtcctcact tcttccca caaggctggc altgtgtag gtcgtgaagg gaaaggccaa aggtttcctg aggagccagt gaggcagat ggaataggaa ataggggcc gcaagatagt ggggaagt ttaccagggca gctagactat actaggcata gttggatgg ggtagccggg agtggggcc gaggccagc attctcaca aatgccctgt taaatagc actcgggaga cacacagtc ggtctgtat ggcctatgat cccatggagg ttggcaaac octaggggagg accttaact ggtagctctg ccacatacc agaaaggta cgtatgalt ggagcagcc gctcccaagg ggaggggcaltg laaccctct ccttggcag cattccatg aaccattc ctgagctgt gctctggtt tctctggt cctgaccc tggaggagaga aggggaagt tctgtccct acagagatgg tgaagggaa gaaltgtggcc cctgggacac aactaaggac ctgagctct agctaccaa ttggctct gttctgacc tggattct ggagggggaa tgcgtttt tctctgct cagacagct agtatctgta ttcaggccaa gctgttcaag gaggtagctg tcttggcat gggaacaga agggacagta ggaacagagg gcacaaagggg aacaaagct atattcatt agagaaagg gttgaatca ggalacgact gctttgtg agttgtgt gacagctctc taacagagg caacccag tctaaggct tcagtggct aattctct tcttctt tttttgaga cagagtttt cctgtgct ccaggctgga gttcaatgt gcaatctgg ctacctgcaa cctccgctc ccgggttcaa gcaattctc tgcctcagcc tccagagtag ctgggaattac aggcacagc cacaaagcc ggctaaact tttgtatt ttgtagaga tgggggttca ccatgtgtt caggctggct tgaactct gacctaggt galtcacca cctcgccct ccaagtgct gggaatagc gttgtgacca ccggccggc cctcttct ttttgggg ggaagatc tgccttgg gtcaggctg gaatgact tggctcagc caactccgc ctccgggt caagtgtatc tctgctca gctcccgag tagctgggat tacaggcag cggcacaca cccagctaat tttttatt ttggtagag atgggggttc accatgtgg ccaggctgt ctcgaactcc cgaactcaag tgaatccac gctcagct cccaaagtgc tgggattaca ggcatggcc accgaccca gttggctgalt ccttgatca gaattctg tggtagcagg tgcctccaa cctgaagcta actggcagcc cagtgtact ggcttggct tggggcagggg cacatggggc ccaaggagg cctctcc accgtgtagc ccccggagt gctggggtag tgcctgtgc cattggccac taccactct ttttgggaa ggtccagcc ccacaggcca cacactcaaa gcagcagta tggaaacccg taacactgc ctgtgtccct tcaagcagat cgtctggaa caacagacta ggcactctga agaaagcaga gggtggccac gtagggggcc aggtcaaaagg acagctcaca tggggaacag aaacagaaat ctctgtgcat ctgcccacagg ggtcactcc caggggcagg cccctgggtg tgggaactc cggccacagg cactgtcaca	A	Homo sapiens

676	194903	G Protein- Coupled Receptor GPCRB3	LR92	P	Homo sapiens
<p> nnnnnnnnnnnn nnnnnnnnnnnnn nnnnnnnnnnnnn nnnnnnnnnnnnn nnnnnnnnnnnnn nnnnnnnnnnnnn nnnnnnnnnnnn ccactgctgt aagccacacag agatcccttaa agatgctcgc agagagagagtc tatgttcgga ctgcatitt ttcttttt ttgagacag agcttgctc tgcgcgccag gatgagagtc agtggcgtga tctggctca ctgcaacccc tgcctccttg gttcaagaaa ttctcctgc tgcctcctt gtagtgcctg gattacaggt gctcgcacc agcctggct aatttttgca tttagcag agacaggttt taccacgtt ggcacagctg gttccaact cctgacctca tggctggccc acctagcct cccaaagctc tgggallaca ggcgtgagccc cccgcgcgcg gtcgcgcgcg gggacttgca ttatgagtc gttatctga ctacagtgag gaaatgaa gaaagaaatt aagactaaa tcaagggggaaa gcttaaggac actgagagag gaaatagctt gagggggtgat gctgtgtgta attccagctg tggctgtgct agtggaagag gaggccagaa agagagagag gggggagagca gggcagggag gagcagcaggt gggcagagact ccaagggtgat ggcacatccc taccacct caccacagag agtggggccta atacagggag aaaaagagct ttgtgtgt agggagagtaa ggtcaatctg ggcctgtctg ggtccatgat gttggcaatgt tgggccaagca tcaaggggctc agatcagag ggaaggagact gaaatgggaa ggttaaacca cgaagccaca gctcgcctgg gaaatgggaa agggagagag agagagagag agcttgcctc gggggaalac ctaccttc agagagagag gggcagaaag agagagagag tgcagagtaa agccaggtgg gggcagggggc ctgaggggggg calaattcc aagggaaagac tctatagag gactgtgtca aaaatgtcac aaaggccag gtcctcatg cctgtaact caccatttg ggaaggccaaag gcaagggtgat tgcctgagcc caggaggtca agccacgtct aggcacata gtagagacct tatctata aaaaalacaa aatagagca agcalgtgtg cacatgctc tggaccagc tactagag tatgaggtgg gaggatgtct tgaagctggg agacaggtgat acacattg accactgcac tccagctga gttcagat gtagatgt cttcaaaaaa aaaaaaaa aaaaalacaa gtcacctaa ataaagagag actgcaagt aggtattgaa tactagagag gtcgccagc tcaagcgaag agcaagagtg gttggggagag aatcggggct agggctcaatg agggcagagaa gaggccagca ggaagctccc atggggaaggg gcaaggagagtc agtctcag gtagagggccc tgggaagaggg agagagagaa gaaalagcac aggcacacac aggcacagca ggaagccca calaagccaa ggagagggctg tggccaag tactagag tacaaggcaaa gggcagagca ctgacatcag caaggtgatg catgacga cctctgagcc agagagagag aaggaagagc aggcagagag gactggggat agtggggagca gttatgggg tgggagagca aggggtgtct ttttgggg gaggagagag ggggagaggt atcactgt caccagagct ggaatgcaat ggtgcaatct cagctcagc caacctcac ctccagat ccaagcaatc tctgtcga gctcgcagag gtcggggat tacaaggcaca caccacact ctacagtaac ttgttatt ttatagagaa tgggggttcg ccalactggc cagggtggct tgaactct ggcctcaagaa gactcgcga gctcgcga ggaatagag gcaagagca cagcgcgcct cagagagatg catctaac aagggcaag gaacctcgg agggagagag gaaatggag gcaagcaggg tacaagctga tggcagagat tcccaagag aatgggttt cccalgagag tggagcagag gactcggag cagctcggaa aagagagagaa ggtcggggca ggaagccagc tggcagggg ccctgactt gtagaag agcagtagcc accaaagaa tccagggggc aggcagagctt gggggggagaca gcaagctc cccatagcc cagccagaa ctgctgaa gggagagag ccaaggtcgg aggtcgcagc ttaccatggg caaccagagaa gggctcagaa gggcggctgt ggtggcagca cgggtgggtg tgcagggcc aatcactggc agcaccgtg gggagagag gagaggtct cctggagct ctatgggtg tggcct </p>					
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QNHGAGLFVM ISSAAQLLIC L TWLVVWTP L PAREYQRFPH LVMLECTETN
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677 194904 WO0034334- hFB41A AX147788 Homo sapiens

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678 194904 WO0034334- hFB41A LR114 Homo sapiens

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CCPFEMDYV VRQLSWEHGH VLCTSVNYLR TVSLYVSTNA LLAIAIDRYL
AIVHPLRPRM KCQTATGLIA LVWTVSILIA IPSAYFTTET VLIVKSQEK IFCGQIWPVD
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679 194905 G Protein-Coupled Receptor MGC7035 BC014241 Homo sapiens

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cgttggcgtg atctgtcccg aggcctgtg gttcccaaa cagcgacgtc aaggtccaca tctgcaaa

680	194905	G Protein- Coupled Receptor MGC7035	LR112	<p>ccctctcggc ttacgctcc tcagcaltca gtttgcaal gaagtgatga aagcttagag ccagattta laccitggg ttaaalact tgattcccc ttgttgtt lacaaaaca gatgttct agaaaatga caaatagtaa aalgaacaaa accctac-gaa agaalgcaa cagccaggtt ggccggggc tgcagtggtg cgcggtgtg tagcaagcc tgcgggtgtt ggcgcagtca ccacaggtt ctgagaacat ttacagaag tgcctgagac gggagacat ggctgtgtt aaatggagt attcaatagc agtgacgagc tctctcagc caccaaagt cctgacac ctcocagcc ccacagata acalcagct aggttttt cagtatgaac ctgtctaaa tcaattctc aagtgtag caaactaaa gaataaat aaacaaaaga aagtgaaaa aaaaaaaa aaaa MWSCSWFNGT XL VEELXACQ DLQLGLSLLS LLGLVGVVPV GLCYNALLVL ANLHKSAMT MPDVYFVNMA VAGLVLSALA PVHLLGPPSS RWALWSVGE VHVALQIPFN VSSLVAMYST ALLSLDHYIE RALPRTYMAS VYNTRHVCGF VWGGALLTSF SLLFYICSH VSTRALECAK MQNAEADAT LVFIGYVVP LATLYALVLL SRVRREDTPL DRDTGRLEPS AHRLLVATVC TQFGLWTPHY LILLGHTVII SRGKPVDAHY LGLLHFVKDF SKLLAFSSSF VTPLLRYMNM QSFPSKLQRL MKKLPCGDRH CSPDHMGVQQ VLA TCCGGACTAG TTCTAGACCG CTGCGGGCCG CCAGGGCCCG GGAATGTCCC CTGAATGCGC GCGGGCAGCG GCGGACGCG CCTTGGCAG CCTGGAGCAA GCCAACCGCA CCGGCTTCC CTCTCTCC GACGTCAAG GCGACCCCG GCTGTGCTG GCGCGGTGG AGACAACCGT GCTGTGCTC ATCTTGCAG TGTCGCTGCT GGGCAACGTG TCGCCCTGG TGCTGTGGC GCGCCGACGA CGCCGGCG CGACTGCTG CTTGTACTC AACCTCTCT GCGCGGACCT GCTCTTATC AGCGTATCC CTCTGTGCT GCGCGTGGC TGGACTGAG CCTCCTGCT GGGCCCCGT GCGTCCACC TGCTCTCTA CGTGATGACC CTGAGCGGCA GCGTACCAT CCTACGCTG GCGCGGTCA GCCTGGAGGG CATGTGRC ATCGRCACC TGGAGCGCG GGTGGGGGT CCTCCGGCG GGCGCGGC AGTGTGCTG GCSCTCATCT GGGCTATC GCGGTGCGC GCTGTGCTC TGTGCTCT CTTCGAGTC GTCCGCAAC GGTCCCGG CGCGACCAG GAAATTCGA TTGCACACT GATTGGCCC AGCATTCCTC GAGATCTC GTGGGATGC TCTTTGTTA CTTTGAACCT CTGTGTGCA GGACTGGTCA TTGTGATCAG TTACTCCAA ATTTACAGA TCACAAAGG ATCAAGGAAG AGGTCACCG TAAGCTGGC CTACTGGAG ACCACCCAGA TCCGCTGTC CCAGCAGGAC TTCCGGCTCT TCCGACCCCT CTTCCTCTC ATGCTCTCT TCTTCATCAT GTGGAGCCC ATCATCATCA CCATCTCT CATCTGATC CAGAACTCA AGCAAGACCT GGTCATCTGG CCGTCCCTCT TCTCTGGT GTCCCTTC ACATTTGTA ATTCAGCCCT AAACCCATC CTCTACAAAC TGACACTGT CAGGAATGAG TGAAGAAAA TTTTGTG CTTCTGTTT CCAGAAAAAG GAGCCATTTT AACAGACACA TCTGTCAAAA GAAATGACTT GTCGATTAT TCTGGCTAAT TTCTTTATA GCGAGTTT TCACACCTGG CGAGCTGTGG CATGCTTTTA AACAGAGTTC ATTTCCAGTA CCCTCCATCA GTGACCCCTG CTTTAAGAAA ATGAACCTAT GCAAATAGAC ATCCACAGCG TCGTAAAT AAGGGGTGAT CACCAAGTTT CATAATATTT TCCCTTTATA AAAGGATTTG TTGGCCAGGT GCAGTGGTTC ATGCTGTAA</p>	P	Homo sapiens
681	194907	G Protein- Coupled Receptor 14273	LD22826	<p>TCCGGACTAG TTCTAGACCG CTGCGGGCCG CCAGGGCCCG GGAATGTCCC CTGAATGCGC GCGGGCAGCG GCGGACGCG CCTTGGCAG CCTGGAGCAA GCCAACCGCA CCGGCTTCC CTCTCTCC GACGTCAAG GCGACCCCG GCTGTGCTG GCGCGGTGG AGACAACCGT GCTGTGCTC ATCTTGCAG TGTCGCTGCT GGGCAACGTG TCGCCCTGG TGCTGTGGC GCGCCGACGA CGCCGGCG CGACTGCTG CTTGTACTC AACCTCTCT GCGCGGACCT GCTCTTATC AGCGTATCC CTCTGTGCT GCGCGTGGC TGGACTGAG CCTCCTGCT GGGCCCCGT GCGTCCACC TGCTCTCTA CGTGATGACC CTGAGCGGCA GCGTACCAT CCTACGCTG GCGCGGTCA GCCTGGAGGG CATGTGRC ATCGRCACC TGGAGCGCG GGTGGGGGT CCTCCGGCG GGCGCGGC AGTGTGCTG GCSCTCATCT GGGCTATC GCGGTGCGC GCTGTGCTC TGTGCTCT CTTCGAGTC GTCCGCAAC GGTCCCGG CGCGACCAG GAAATTCGA TTGCACACT GATTGGCCC AGCATTCCTC GAGATCTC GTGGGATGC TCTTTGTTA CTTTGAACCT CTGTGTGCA GGACTGGTCA TTGTGATCAG TTACTCCAA ATTTACAGA TCACAAAGG ATCAAGGAAG AGGTCACCG TAAGCTGGC CTACTGGAG ACCACCCAGA TCCGCTGTC CCAGCAGGAC TTCCGGCTCT TCCGACCCCT CTTCCTCTC ATGCTCTCT TCTTCATCAT GTGGAGCCC ATCATCATCA CCATCTCT CATCTGATC CAGAACTCA AGCAAGACCT GGTCATCTGG CCGTCCCTCT TCTCTGGT GTCCCTTC ACATTTGTA ATTCAGCCCT AAACCCATC CTCTACAAAC TGACACTGT CAGGAATGAG TGAAGAAAA TTTTGTG CTTCTGTTT CCAGAAAAAG GAGCCATTTT AACAGACACA TCTGTCAAAA GAAATGACTT GTCGATTAT TCTGGCTAAT TTCTTTATA GCGAGTTT TCACACCTGG CGAGCTGTGG CATGCTTTTA AACAGAGTTC ATTTCCAGTA CCCTCCATCA GTGACCCCTG CTTTAAGAAA ATGAACCTAT GCAAATAGAC ATCCACAGCG TCGTAAAT AAGGGGTGAT CACCAAGTTT CATAATATTT TCCCTTTATA AAAGGATTTG TTGGCCAGGT GCAGTGGTTC ATGCTGTAA</p>	A	Homo sapiens

682	194907	G Protein- Coupled Receptor 14273	LR116	<p>TCCCAGCAGT TTGGGTGAG GTGGGTGGAT CACCTGAGGT CAGGAGTTCG AGACCAACCT GACCAACATG GTGAGACCCC CGTCTCTACT AAAAATAAAA AAAAAATTA GCTGGGAGTG GTGGTGGGA CCTGTAATCC TAGCTACTTG GGAGGCTCAA CCACGAGAA CTCTTGAACC TGGGAGGCAG AGGTTCAGT GAGCCGAGAT CGTGCCATTG CACTCCAACC AGGCAACAA GAGTGAACCT CCATCTTAAA AAAAAAATAA AAGATTGT TATGGGTTC TTTAAATGT GAACTTTTT AGTGTGTTG TATATGATCA AATTAATAA ATATTTATTT ATGACTGTTC AGCAAAAAA AAAAAAATAA AGGCGCG MSPECARAAAG DAPLRLEQA NRTRFFFSK VKGDHRL VLA AVETTVLVLI FAVSLLGNCV ALVLVARRRR RGATACTVLN LFCADLLFIS APLVLA VRW TEAWLLGPVA CHLLFYVMTL SGSVTILTLA AVSLDRMVCI VMLQRGVRCR GRRARAVLLA LIWGYSAVA LPLCVFFRVV PQRLLPGADQE ISICTLIWPT IPGEISWDVS FVTNLFLVPG LVIVISYSKI LQTTKASRR LTVSLAYSRS HQIRVSQDF RLFRILFLM VSFIMWSP I DITILLIQ NFKQDLVIWP SLPPWVVA PT FANSALNPIL YNMILCRNEW KKIFCCTWFP EKGAILDTS VKRNDLSIIS G ITYSAISDEL RDKVRFPALL RTPSADHHV EAMVQMLHF RWNWIIVLVS SDTYGRDNGQ LLGERVARRD ICIAFQETLP TLQPNQNM TS EERQRLVTIV DKLQQSTARV VVVFSPDLTL YHFFNEVL RQ NFTGA VVIAS ESWAIDPVLH NLTELGLHGT FLGITQSV IPGFSEFREW GPQAGPPPLS RTSQSYTCNQ ECDNCLNATL SFNTILRLSG ERVVSYSVA VYAVAHALHS LLGCDKSTCT KRVVYPWQLL EEIWK VNFIL LDHQIFFDPQ GDVALHLEIV QWQWDRSQNP FQSVASYPL QRQLKNIKTS LHTVNNITPM SMC SKRCQSG QKKKPVG IHV CCFECIDCLP GTFLNHTCEP NNEWSYQSET SCFKRQLVFL EWHEAPTIAV ALLAALGFLS TLAILVIFWR HFQTPIVRSA GGPMCFMLT LLLVAYMVVP VYVGPKVST CLCRQALFPL CFTICISIA VRSFQIVCAF KMASRFP RAY SYWVRYQGPY VSMAFITVLK MVIVIGMLA RPQSHPRIDP DDPKITIVSC NPYRNSLLF NTSLDL LLSV VGFSFAYMGK ELPTNYNEAK FITLSMTIFYF TSSVSLCTFM SAYSGVLVTI VDLLVTVLNL LAISLGYFGP KCYMILFYPE RNTPAYFN SM IQGYTMRRD</p>	P	Homo sapiens
683	194908	G Protein-coupled Receptor Gpcrb4	LR117	<p>alagacagca attcatcct gctgggct ggcagctgt gctacgcgaa cglgaagg gctgtgtga aaalccctt ctgcgcgga tccgggga tctgtacat agtgttgc ttggggctg tgcgtgctgt gtttggaac ctctgtgga tgaattcaat ctccattc aagcagctgc actccgac caatttctc gtgcctcic tggcctgcg tgcgtgtga cgtgtgctg cttcagcatg gtcaggagg tggagagctg ctggaattt gggagaggtt ttgtactt ccacactgc tgtgaltggt catttghta ctcttctc ttactgt gctcctc catcgacagg tacatgagg ttagtacc cctgtctat cctaccaagt tcaaccgtac tgtgtcagga altgtcatca gcgtgtcctg gatctgccc ctatgtaca ggcgtgctgt gtttacaac ggtgtcaltg acgatggct ggaggaatia tctgtgccc taactgtat agggaggtgt cagaccgttg taatacaaa ctgggtgtg acagatttc tatctctt talacclacc ttattatga taatictga tggtaacata ttctgttgg ctgacgaca ggcgaaaaag atagaaata ctggtagcaa gacagaalca tctcagaga gttacaagc cagagtgcc aggaagagaga gaagaagcagc taataccctg ggggtcacag tggtagcat taltattca tgggtacct atagcatga ttcaattat gatgcttta tggccttata aaccctgccc tgaattatg agattgtcgt ttgggtgct taitataact cagocalgaa tcttgatt tatgcttat ttaccatg gtttaggaaa gcaataaag</p>	P	Homo sapiens
684	194957	Trace Amine Receptor 4 (TA4)	AF380192		A	Homo sapiens

685	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	<p>ttattgaac tggcaggt taaagaaca gtcagcaac calgaattg ttcttgaac atalataa</p> <p>MSSNSSLLVA VOLCYANVNG SCVKIPSPG SRVIL YIVFG FGAVLAVFGN</p> <p>LLVMISILHF QQLHSPTNFL VASLACADEL VGVTVMPFSM VRTVESCWYF</p> <p>GRSCTFHTC CDVAFCYSSL FHLCFISDR YIAVTDPLVY PTKFTVSVSG ICISVSWILP</p> <p>LMYSGAVFYT GYVDDGLEEL SDALNCIGGC QTVVNQNWVL TDFLSFFIPT</p> <p>FIMILYGNL FLVARRQAKK IENTGSKTES SSESYPKARVA RRERKAAKTL</p> <p>GVTVAFMIS WLPYSIDSLI DAFMGFTPA CIYEICCWCA YNSAMNPLI</p> <p>YALFYPWFRK AIKVVITGVQV LKNSSATMNL FSEHI</p>	P	Homo sapiens
686	194958	Trace Amine Receptor 5 (TA5)	AF380193	<p>atgacagca attttcca accgtgtg cagcttgt atgaggatg gaalgatc tgaatgaaa ctccattc tccgggtcc</p> <p>cgggtaattc tgaacggc gtttagctt cggcttgc tggctgatt tggaaatc tgaatgaa cttctgtc tcatitaa</p> <p>cagcggcact cccaacca ttctcatl gccctcgg ccgtgctga cttctgta ggtgtgacg tgaacttt cagcaggc</p> <p>aggacgggg agagctgcg gtaittgga gccaaattt gtaactca cagttcgt gatggcat ttgttacc ttctgtcc</p> <p>cacttgc tcalcgcat cgacaggac attgtgta cgaacctt ggaacctt accaagttc ccgtgtcgt gtcgggaatt</p> <p>tgcacagcg tgcctggat tgcctcic acgtacagc gtcgtggt ciacacaggt gcaatgag atggcctgga</p> <p>ggaaatgta agtgcctca acgtgagg tggctgcaaa ataatgaa gcaaggctg ggtgtgata gattttcgt tattctcat</p> <p>acctacctt gtaatgaa ttcttiacg taagatttt ctatagcta aacaacaagc tataaaatt gaaactiaa gtagcaag</p> <p>agaatcacc tcaagagat alaaatcag agtggccaag agagaggagga aagcagctaa aacctgggg gtcacggac</p> <p>tagcattgt tattcagg ttaccgata cagtigalat ataatgat gccattgg gcttcagac ccctgcctat alctatgaaa</p> <p>tttgcgtg ggtgctat talaactcag ccatgaacc ttgattat gctctatt alcctgtt taggaaagcc ataaaacta</p> <p>tttaaggg agatgta aaggctgt catcaacct tagtatt ttgaataa</p>	A	Homo sapiens
687	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	<p>MTSNFSQPVV QLCYEDVNGS CIETPSPGS RVILYTAFSF GSLLAVFGNL</p> <p>LVMTSVLHFK QQLHSPTNFLI ASLACADFLV GVTVMFLSMV RTVESCWYFG</p> <p>AKFCTLHSCC DVAFCYSSVL HLCFICIDRY IVVTDPLVYA TKFTVSVSGI CISVSWILPL</p> <p>TYSGAVFYTG VNDDGLEELV SALNCVGGCQ IIVSQGWLI DFLFFIPTL VMILYSKIF</p> <p>LIAKQQAUKI ETTSSKVESS SESYKIRVAK RERKAAKTLG VTVLAFVISW LPYTVDILID</p> <p>AFMGFLTPAY IYEICCWSA YNSAMNPLIY ALFYPWFRKA IKLLSGDVL</p> <p>KASSTISLF LE</p>	P	Homo sapiens
688	194989	MrgX4 G Protein-Coupled Receptor	AY042216	<p>tgcaltgt tcttctgt ccatggatga ccagtcctag tcaagagtg gtcacaaca cctcttgg taltgtaatt cctccacctg</p> <p>aaagaaaatt tcaagaccag galagatkaa tcatgggic caaagccctg gcccggatgag tggggggtgt tgaactaa</p> <p>tgtattccc algtcagcac agaactgtg tggcagtaga gtagatgtag gcttcagagt caacaagaac tggatttcaa</p> <p>actggattg aggaaccca ccttggtaa gtagctatt alcgtcagc cctgttct cttcttta aatgaggaca gtaaatcca</p> <p>tacggcaggg tggtagggag aatcagagat galacagctg gtagacat cttgtttg ttccagggg caccagacia</p> <p>gagtttctga gcatggatcc aaccgtcca gcttcggta caaactgac accaatcaac ggaactgagg agactcctg</p> <p>ctacaatcag accttgaact tcaagggt gtagtgcac atttccctg tgggctgac aggaacggc gtagtgcct</p> <p>ggctcctggg ctaccgalt cgaggaagc ctgtctccat ctacatcct aacctggccg cagcagact cctctcctc</p> <p>agcttcaga ttacgttc gcatcagc ccatcaala tcaagccatc catccgaaa atctgttt cttgtagac ctltccctac</p> <p>tttaaggcc tgaatgct gtagggcatc agcaccgagc gctgcctg tgtctgtg ccatctgt accgtggccg</p> <p>cggccacca caactgac cgtctgtg tctctgct tggggcctgt cctgtgtt tgaatgct gtaggggt tctgtgact</p> <p>cctgtttagt ggtgtgatt clagtggg tgaacgtca gatttacc cagtcggcgt gctgattt ttatgtgt ttctgtgt</p> <p>ttcagcctg gtcctgtg tcaagatct cttggatcc cgggaagtc cgtgaccag gctgtacgt accatcctg</p>	A	Homo sapiens

689	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	MDPTVPVFGT KLTPINGREE TPCYNQTLSTF TVLTCTISLV GLTGNAVVLW LLGYRMRRNA VSYILNLAA ADFLFLSFQI IRSPLRLINI SHLIRKILVS VMTFPYFTGL SMLSIASTER CLSVLWPIWY RCRPPTHLSA VVCVLLWGLS LLFSMLEWRF CDFLFGADS SWCETSDFIP VAWLFLCVV LCVSSLVLLV RILCGSRKMP LTRL YVTILL TVLVFLLCGL PFGILGALY RMHLNLEVLY CHVYLVCMSL SSLNSSANPI IYFFVGSFRQ RQNRQNLKLV LQRALQDKPE VDKGEGQLPE ESLELSGSRL GP	P	Homo sapiens
690	195015	G Protein- Coupled Receptor GPR82	AF411111	atgaacaaca atacaacalg tattcaacca tctatgatct ctccatggc tttaaccaalc atttaccatcc tcccttgat tgttggigt tttggaaaca cctctctca atggatatt ttacaacaaa taggiaaaaa aacalcaacg cacalctacc tgcacacct tggacigcga aacctacttg tggcagcgc calgccttc algagatct atttcigaa aggtttccaa tgggaataic aatcigcica algcagagig gtcaatttic tgggaactct atccatgcat gcaagialgt tgcagict cttaattta agtltggatig ccataagccg clatgclacc ttaalgcaaa agggattccic gcaagagact acttcalgct atgagaaaaat atttatggc catttactga aaaaatticg ccagcccaac tttgcagaa aactalgcac ttacatagg ggagtgtgac tgggcataat cattccaggt accgtatata actcagcat agaggctaca gaaaggagaag agagccatg clacaatcg cagalggaaac tagggagccat gatctctcag atttcagggc tcatitggaaac cacatttati ggattttct tttatgagt actaacatca tactactct tttgaagca tctgagaaaa ataaagaact gtagtccat tatggagaag gatttgactt acagtctct gaaaagacat cttttggca tccagattct actaatagtt tgcctcttc ctatagat ttttaaacc atttttatg ttctacaca aagagataac tgcagcaat tgaattatt aatagaaca aaaaacalc taccigtct tgcctggcc agaagtagca cagacccat tatattct ttatagaca aaacattcaa gaagacacta tataatctct ttacaagtc taattcagca catatgcaal catatggttg a	A	Homo sapiens
691	195015	G Protein- Coupled Receptor GPR82	AAL26482	MNNNTTCIQP SMSSMALPI IYLLCIVGV FGNTLSQWIF LTKIGKKTST HIYLSHLVTA NLLVCSAMPF MSYFLKGFQ WEYQSAQCRV VNFLGTLSMH ASMFVSLIL SWIAISRYAT LMQKDSQET TSCYEKIFYG HLLKKFRQPN FARKLCIYW GVVLGIIIPV TVYYSVIEAT EGEESLCYNR QMELGAMISQ IAGLIGTTFI GFSFLVVLTS YYSFVSHLRK IRTCTSIMEK DLTYSVVKRH LLVIOILLIV CFLPYSIFKP IFYVVLHQRDN CQQLNYLIET KNILTCLASA RSSTDPIFL LLDKTFKKTL YNLFTKSNSA HMOSYG	P	Homo sapiens

SEQ ID	LSID	Gene	Source ID	Sequence	Code	Species
NO:						
1	127	5-HT1A Receptor	NM_000524	atggatgtgc tcagccctgg tcagggcaac aacaccacat caccaccggc tccctttgag accggcgga acactactgg tatctccgac gtgaccgtca gctaccaagt gatacctct ctgctgtgg gcacgtcat ctctgctgcg gtgctgggca atgctgctgt ggtggtgccc atcgccctgg agcgtccct gcagaacgtg gccaatatc ttattggctc ttggcggtc accgacctca tgggtgcggt gttggtgctg cccatggcg cgctgtatca ggtgetcaac aagtggacac tgggccaggt aacctgcgac ctgttcacg cctcgacgt gctgtgctgc acctatcca tcttgacact gtgcgccatc gcgctggaca ggtactgggc catcaccgac ccatcgact acgtgaacaa gaggacgcc cggccgctg cgtcatctc gctacttgg cttattggct tctcatctc tatccgcc atcctgggt ggcacccc ggaagaccgc tcggacccc acgcatgcac cattagcaag gctgtctatg atggttctct attccagct ggagcttct acatccgct gctgctcatg ctggttctct atggcgcat attccagct gcgccttcc gcaccgcaa gacggtcaaa aaggtggaga agaccggagc ggacaccgc catggagcat ctccgccc gcagcccaa aagagtgtga atggagagtc gggagcagg aactggaggc tggcggtgga gagcaaggct gggggtgctc tgtgcgcaa tggcgcggtg aggcaagggt acgatggcg cgcctggag gtgactgagg tgcaccagt gggcaactcc aaagagcact tgcctctgcc cagcaggct ggtcctacc cttgtgccc cgcctcttc gagaggaaa atgagcgcaa cgccaggcg aagcgcaaga tggccctggc ccgagagagg aagacagtga agacgtgg catcatcatg ggcacctca tctctgtg gctgcccctc ttcatcgtgg ctctgttct gccttctgc gagagcagt gccacatgc caccctgttg ggcgccataa tcaattggct gggctactcc aactctctg ttaacccgt catttacgca tacttcaaca aggactttca aaacgcgtt aagaagatca ttaagtgtaa cttctgcgc cagta	A	Homo sapiens
2	127	5-HT1A Receptor	NP_000515.1	MDVSPGGN NTTSPAPFE TGNNTGISD VTVSYQVITS LLLGTLIFCA VLGNA CVVAA IALERSIQNV ANYLIGSLAV TDLMSVLVL PMAALYQVLN KWTLGQVTCDFIALDVLCC TSSILHLCAI ALDRYWAITD PIDYVNRTP RPRALISLTW LIGFLISIPP ILGWRFPEDR SDPDATISK DHGYTIYSTF GAFYIPLLLM LVLYGRIFRA ARFRIRKTVK KVEKTGADTR HGASPAPOPK KSVNGESGR NWRLGVESKA GGALCANGAV RQDDDDGALE VIEVHRVGN KEHLPLPSEA GPTPCAPASF ERKNERNAEA KRKMALARER KTVKTLGIIM GTFILCWLPF FIVALVLPEC ESSCHMPTLL GAINWLGYNS NSLLNPVIYA YFNKDFQNAF KKIHKCNFCR Q	P	Homo sapiens
3	128	5-HT1B Receptor	NM_000863	atggaggaaac cgggtgctca gtgcgctcca ccgcgcgcgc cgggctccga gacctgggtt cctcaagcca acttatctc tgcctccctc caaaactgca gcgccaagga ctacatttac caggactcca tctccctacc ctggaaagta ctgctggtta tgcatttggc gctcatcacc ttggccacca cgctctccaa tgccttctgt attgccacag tgtaccggac ccggaactg cacaccggg ctaactacct gatgcctct ctggcggtca ccgacctgt tgtgtccatc ctggtgatgc ccatcagcac catgtacact gtcaccggcc gctggacact gggccagggtg gtctgtgact tctggctgtc gtcggacatc acttgttga ctgcctccat cctgcacctc tgtgtcatcg ccctggaccg ctactggcc atcacggacg ccgtggagta ctcagctaaa aggactccca agagggcggc ggtcatgac gcgctggtgt ggtcttctc catctctatc	A	Homo sapiens

77/448

4	128	5-HT1B Receptor	NP_000854.1	<p>tcgctgccgc cctttctctg gcgtcaggct aaggccgaag aggaggtgtc ggaatgcgtg gtgaacaccc accacatcct ctacacggct tactccacgg tgggtgcttt ctactcccc accctgctcc tcatcgccct ctatggcgc ttgacccgag ccacgctgat aaccgactcc aaacagacgc ccaacaggac cggcaagcgc ttcacccgag ttcocgacgt gccagcgaa cccggtcca cgtcctcgtt cacctctatt aactcgcggg ttcocgacgt gccagcgaa tcgggatctc ctgtgtatgt gaaccaagtc aaagtgcgag ttcocgacgc cctgctggaa aagaagaaac tcatggccgc tagggagcgc aaagccacca agaccctagg gatcatattg ggagccttta ttgtgtgttg gctacccttc ttcacatct cctagtgtat gcctatctgc aaagatgcct gctggttcca cctagccatc ttgacttct tcaatggct gggctatctc aactccctca tcaaccccat aatctatacc atgtccaatg aggactttaa acaagcattc cataaactga tacgttttaa gtgcacaagt tga</p>	Homo sapiens
5	129	5-HT1D Receptor	NM_000864	<p>agccaaatgt gtggaggtct gtgggaagag agagccacct agcatgtccc cactgaacca A gtcagcagaa ggccttcccc aggagcctc caacagatcc ctgaatgcc cagaaacctc agagccttg gatccagga cctccaggc gctcaagatc tccctggccg tggctccttc cgtcatcaca ctggccacag tccctccaa tcccttgta ctcaecacca tcttactcac caggaagctc cacacccctg ccaactacct gattggctcc ctggccacca ccgacctctt ggttccatc ttgtaatgc ccacagcat gcctatacc ataccacca cctggaaactt tgccaaaatc ttgtgtgaca tctggctgtc ctctgacatc acgtgtgca cagcctccat cctgcattc ttgtgtcattg cctgtgacag gtactgggca atcacagatg ccctgggaata cagtaaacgc aggacggctg gccacgggc caccatgatc gccattgtct gggccatctc catctgcatc tccatcccc cgtctctctg gcggcaggcc aagcccagg aggagatgtc ggactgtctg gtgaacacct ctacagatctc ctacaccatc tactccacct gtggggcctt ctacattccc tcgggtgtgc tcatcctct atatggccgg atctaccggg ctgcccggaa ccgcattctg aatccacct cactctatgg gaagcgttc accacggccc acctcatcac aggctctgcc gggctctcgc tctgtctgct caactccagc tccatgagg ggcactcgca ctcggctggc tccccctct ttttcaacca cgtgaaaatc aagcttgctg acagtgcctt ggaacgcaag aggatctctg ctgctcgaga aaggaagcc actaaaatcc tgggcatcat tctgggggccc ttatcatct gctggctgccc ctctctctg gtgtctctgg tctccccat ctgcggggac tctgtctgga tccacccggc gctctttgac tcttccacct ggtaggcta tttaaaactc ctcatcaatc caataatcta cactgtgttt aatgaagatg ttcggcaagc ttttcagaaa atgttccctt tccggaaggc ctctagtct taticgatga ggtaaaagaa</p>	Homo sapiens
6	129	5-HT1D Receptor	NP_000855.1	<p>MSPLNQSAEG LPQEAENRSL NATETSEAWD PRTIQALKIS LAVVLSVITL ATVLSNAFVL P TTILLTRKLH TPANYLIGSL ATTDLLVSIL VMPISIAITI THWNFGQIL CDIWLSSDIT CCTASILHLC VIALDRYWA TDALEYSKRR TAGHAATMIA IVWAISICIS IPPLFWRQAK</p>	Homo sapiens

7	130	5-HT1E Receptor	NM_000865	<p> AQEEMSDCLV NTSQISYTIY STCGAFYIPS VLLIILYGRI YRAARNRIIN PPSLYGKRFT TAHLITGSAG SSLCSLNSSL HEGHSHSAGS PLFFNHVKIK LADSALERKR ISAAPERKAT KILGIILGAF IICWLFFV SVLPICRDS CWIHPALFDF FTWLGYLNSL INPIIYTVFN EEFRQAFQKI VPRKAS atcgaatgtt gagagaagca gtgctctgat ccagctcagg agaaaaagga gcgggttccg A agtgagactt ctggagccag ctggacgtgc cggtttccc agtgcggcg gcctgcacgc accgtccaca agagtctcag tgcgccaggc tggagtgacg cagcacagtc tcacctcatt gaaacctcgc cctcccggtt tccgcctcag tccgctcag ctctcctagta gctgggattg caggcaactca ccaccatgcc cggctaattt tttgaatttt tagtgagac gggatttcac catgttgccc atgctggctc tgaacccccg acctcggatg attcgccgcg ctcgccctcc caaagtgtg gaattacag cgaaccttca ctcagaagaa atgctgtggc ccttcccttt accaacagaa aatggaacac aagagaccac atagctgaac aaattatagc ctcttaca gtgagaaacc ttcgaggcta catagtcttc agcctcagg aaataaccaa cagcttctcc acagtgtaga ctgaaacaag ggaacacatga acatcacaaa ctgtaccaca gaggccagca tggctataag acccaagacc atcaactgaga agatgctcat ttgcatgact ctgggtgtca tcaccacctt caccacgttg ctgaacttgg ctgtgatcat ggctattggc accaccaaga agctccacca gctgccaac tacctaactt gttctctggc cgtgacggac ctctgtgtg cagtgtcgt catgcccctg agcatcatct acattgtcat ggatcgtgg aagctgtggt acttctcttg tgaggtgtgg ctgagtggtg acatgacctg ctgacacctg tccatctcc acctctgtg cattgccctg gacaggtact gggccatcac caatgctatt gaatacgcca ggaagaggac ggcaagagg gccgcgtga tgatccttac cgtctggacc atctccattt tcatctccat gcccctctg tcttgagaa gccaccgccc cctaaagccct cccctagtc agtgaccat ccagcacgac catgttatct acaccattta ctccacgtg ggtgcgtttt atatccctt gactttgata ctgattctct attaccggat ttaccacgag gccaaagacc tttaccagaa aggggatca agtcggcact taagcaacag aagcacagat agccagaatt cttttgcaag ttgtaaactt acacagactt tctgtgtgct tgacttctcc acctcagacc ctaccacaga gtttgaaaag ttccatgcct ccatcaggat ccccccttc gacaatgatc tagatcacc aggagaactt cagcagatct ctgacaccag ggaacggaag gcagcacgca tcctggggct gattctgggt gcattcattt tatcctggct gccattttt atcaaaagt tgattgtggg tctgagcatc tacaccgtgt cctcggaagt ggcgacttt ctgacgtggc tcggttatgt gaattctctg atcaacccct tgctctatc gagttttaa gaagacttta agctggcttt taaaaagctc attagatgcc gagagcatac ttagactgta aaagctaaa aggcacgact tttccagag cctcatgagt ggatgggggt aaggggtgca acttattaat tcttgaacat acttggttca ggaggtttg taagtattg tggctctgtt tcctgtttg ttgtttgtt ttgtctgtt ttgttgagg attgtattt ggcgtgctgt tttctacctc tggctttatc tgtgatacat aattcaaat aaacattatc atcaaaaaa aaaaaaaa aaaaaaaa </p>	Homo sapiens
8	130	5-HT1E Receptor	NP_000856.1	<p> MNITNCTTEA SMAIRPKTIT ERMICMTLV VITLTLN LAVIMAIGTT KKLHQPNYL P ICSLAVTDLL VAVLMPLSI IYVMDRWKL GYFLCEVWLS VDMTCCTCSI LHLCVIALDR YWAITNAIEY ARKRTAKRAA LMILVWTIS IFISMPPFLW RSHRRLSPPP SQCTIQHDHV IYTIYSTLGA FYIPLTLILI LYYRIYHAAK SLYQKRGSSR HLSNRSTDSDQ NSFASCKLTQ </p>	Homo sapiens

9	131	5-HT1F Receptor	NM_000866	<p>TFCVSDSTS DPTEFEKFH ASIRIPPFDN DLDHPGERQQ ISSTRERKAA RILGLILGAF ILSWLPFFIK ELIVGLSIYT VSSEVADFLT WLGYNLSLIN PLIYTSFNED FKLAFFKLIR CREHT</p> <p>atggatttct taaattcatc tgatcaaaac ttgacctcag aggaactgtt aaacagaatg A ccatccaaaa ttctgggtgc cctcactctg tctgggctgg cactgatgac aacaactatc aactcccttg tgatcgctgc aattattgtg acccggaagc tgaccatcc agccaattat ttaatttgtt ccttgagcgt cacagatttt cttgtggctg tctggtgat gcccttcagc attgtgtata ttgtgagaga gagctgatt atggggcaag tggctgtga catttggtg agtgttgaca ttactgtcg cacgtgctc atcttgcatc tctcagctat agctttggat cgggtatcgag caatcacaga tgcgtgtgag tatgccaga aaaggactcc aaagcatgct ggcattatga ttacaatagt ttggattata tctgttttta tctctatgcc tctctattc tggaggcacc aaggaaactag cagagatgat gaatgcatca tcaagcacga ccacattgtt tccaccattt actcaacatt tggagcttcc tacatcccac tggcattgat ttgatcctt tactacaaaa tatatagagc agcaagaca ttataccaca agagacaagc aagtaggatt gcaaggagg aggtgaatgg ccaagtctt ttggagagtg gtgagaaaa cactaaatca gtttccacat cctatgtact agaaagtct tctctgacc catcaacaga ctttgataaa attcatagca cagtgaag tctcagctc gaattcaagc atgagaaatc ttggagaaag caaaagatct caggtacaag agaagcgaag gcagccacta cctgggatt aatctgggt gcatttgtaa tatgttggt tcttttttt gtaaaagaat tagttgttaa tgcctgtgac aaatgtaaaa ttctggaaga aatgtccaat tttttggcat ggcttggtga tctcaattcc cttataaaatc cactgattta cacaatctt aatgaagact tcaagaaagc attccaaaag cttggtgcgt gtcgatgtta g</p>	Homo sapiens
10	131	5-HT1F Receptor	NP_000857.1	<p>MDFLNSSDQN LTSEELNRM PSKILVSLTL SGLALMTTI NSLVIAAIIV TRKLHPANY P LICSLAVTDF LVAVLMPFS IVYIVRESWI MGQVVCIDIWL SVDITCCTCS ILHLSAIALD RYRAITDAVE YARKRTPKHA GIMITIVWII SVFISMPPLF WRHQGTSRDD ECIKHDHIV STIYSTFGAF YIPLALIL YKIYRAAKT LYHKRQASRI AKEEVNGQVL LESEKSTKS VSTSYVLEKS LSDPSTDFDK IHSTVRSLSRSE EFKHEKSWRR QKISGTRERK AATTGLILG AFVICWLPFF VKELVVNVCD KCKISEMSN FLAWLGYLNS LINPLIYTIF NEDEKKAFOK LVRRC</p>	Homo sapiens
11	132	5-HT2A Receptor	NM_000621	<p>gaattcgggt gagccagctc cgggagaaca gcatgtacac cagcctcagt gttacagagt A gtgggtacat caaggtgaat ggtgagcaga aactataacc tgttagtctc tctacacctc atctgctaca agttctggct tagacatgga tattctttgt gaagaaaaata cttctttgag ctcaactacg aactccctaa tgcaattaaa tgatgacacc aggtcttaca gtaatgactt taactctgga gaagctaaca cttctgatgc atttaactgg acagtgcact ctgaaaaatcg aaccacactt tctgtgaaag ggtgcctctc accgtcgtgt cttctcttac ttcatctcca ggaaaaaaac tggctctgctt tactgacagc cgtagtgtatt attctaaata ttgctggaaa catactcgtc atcatggcag tgtccctaga gaaaaagctg cagaatgcca ccaactattt cctgatgtca cttgccatag ctgatatgct gctgggtttc cttgtcatgc cgtgtccat gttaaccatc ctgtatgggt accggtggcc tctgcccagc aagctttgtg cagtctggat ttacctggac gtgctcttct ccacggcctc catcatgcac ctctgcgcca tctcgtgga ccgctacgtc gccatccaga atcccatcca ccacagccgc ttcaactcca gaactaagc</p>	Homo sapiens

attctgaaa atcattgctg ttgggacccat atcagtaggt ataccatgc caataccagt
 ctttgggcta caggacgatt cgaaggtctt taaggagggg agttgcttac tcgccgatga
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 cacaataccg gctttggcct acaagtctag ccaacttcaa atgggacaaa aaagaattc
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 aatgatattg ctttaaaatg attcactttt attgtataat tatgaagccc taagtaaatc
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 ctatcacccc gaattc

12 NP_000612.1 MDILCENTS LSSTNSLMQ LNDDRLYSN DENSGEANTS DAFNWTVDSE NRTNLSCEGC P Homo
 132 5-HT2A Receptor LSPSCLSLH LQKNWSALL TAVVILTIA GNILVIMAVS LEKKLQATN YFILMSLAID sapiens

13	133	5-HT2B Receptor	NM_000867	<p>MLLGLFVMPV SMLTILYGYR WPLPSKLCV WYLDVLFST ASIMHLCAIS LDRYVAIQNP IHHSRFSRT KAFLEKIIAW TISVGISMPI PVFGLQDDSK VFKEGSCLLA DDNEFLIGSF VSFFIPLTIM VITYFLTIKS LQKEATLCVS DLGTRAKLAS FSELPQSSLS SEKLFQRSIH REPGSYTGRR TMSISNEQK ACKVLGIVFF LFWVMCPFF ITNINAVICK ESCNEDVIGA LLNVFWIGY LSSAVNPLVY TLENKTYRSA FSRYIQCYK ENKKPLQLIL VNTIPALAYK SSQLQMGQKK NSKQDAKTTD NDCSMVALGK QHSEEAASKDN SDGVNEKRVSC V</p> <p>tactaaccat gctgaccact gttcggaacg ggattgaatc acagaaaaac agcaaatggc A tctctcttac agagtgtctg aacttcaag cacaattcct gagcacattt tgcagagcac ctttgttcac gttatctctt ctaactgggtc tggattacag acagaatcaa taccagagga aatgaaacag attgttgagg aacagggaac taaactgcac tgggcagctc tctgatact catggtgata ataccacaa ttggtggaaa tacccttgtt attctggctg tttcactgga gaagaagctg cagtatgcta ctaattactt tctaattgcc ttggcgggtg ctgatttgtt ggttggttg tttgtgatgc caattgccct cttgacaata atgtttgagg ctatgtggcc cctccactt gttctatgtc ctgctgggtt attcttgac gttctctttt caaccgcac catcatgcat cttctgtgcca tttcagtgga ttgttacata gccatcaaaa agccaatcca ggccaatcaa tataactcac gggctacagc attcatcaag attacagtgg tgtggttaat ttcaatagc attgccattc cagtccttat taaagggata gagactgatg tggacaaccc aaacaatate acttggtgac tgacaaagga acgttttggc gatttcacg tctttggctc actggctgcc tttctcacac cttctgcaat tatgattgtc acctactttc tcaatatcca tgctttacag aagaaggctt acttagtcaa aaacaagcca cttcaacgcc taacatggtt gactgtgtct acagttttcc aaaggatga aacaccttgc tctgaccggg aaaaggtggc aatgctggat ggttctcgaa aggacaaggc tctgcccac tccagtgatg aacacattat gcgaagaaca tccacaattg gaaaaagtc agtcagacc atttccaacg aacagagagc ctcaagggtc ctagggttg ttgttttctt ctttttgctt atgtgtgtgc cttctttat tacaatatata actttagttt tatgtgattc ctgtaaccaa actactctcc aatgctcct ggagatatatt gtgtggatag gctatgtttc ctccaggagt aatcctttgg tctacacct cttcaataag acatttcggg atgcatttgg ccgatatatc acctgcaatt accggggccac aaagtcagta aaaaactctc gaaaacgctc cagtaagatc tacttccgga atccaatggc agagaactct aagtttttca agaaacatgg aattcgaaat gggattaacc ctgccatgta ccagagtcca atgaggctcc gaagttcaac cattcagttc tcatcaatca tttactaga tacgcttctc ctcaactgaa atgaagggtga caaaactgaa gagcaagtta gttatgtata gcagaactgg cagttgtcat caaacataat gatgagtaag atgatgaatg agatgtaaat gtgcccagaa tatattatat aaagaatttt atgtcatata tcaaatcatc tctttaacct aagatgtaag tattaagaat atctaatttt cctaatttgg acaagattat tccatgagga aaataatttt atatagctac aaatgaaaac aatccagcac tctggttaaa ttttaaggta ttcgaatgaa ataaagtcaa atcaataaat ttcaggcttt aaaaaaaaaa</p>	Homo sapiens
14	133	5-HT2B Receptor	NP_000858.1	<p>MALSYRVSEL QSTIPEHIQ STFFHVHSSN WSGLQTESIP EEMKQIVEEQ GNKLHMAALL P ILMVIPTIG GNTLVILAVS LEKKLQYATN YFLMSLAVAD LVLGLFVMPI ALLTIMFEAM WPLPLVLCPA WFLDLVLFST ASIMHLCAIS VDRYIAIKKP IQANQYNSRA TAFIKITVW LISIGIAIPV PIKGIETDND NPNNITCVLT KERFGDFMLF GSLAAFFFTPL AIMIVTYFLT IHALQKKAYL VKNKPPQRLT WLTVSTVFQR DETPCSSPEK VAMLDGSRKD KALPNSGDET</p>	Homo sapiens

15	134	5-HT2C Receptor	nm_000868	V	LMRRTSTIGK KSVQTSISNEQ RASKVLGIVF FLFLMMWCPF FITNITLVLC DSCNQTTLOM LLEIFVWIGY VSSGWNPLVY TLFNKTFRDA FGRIYITCNRYR ATKSVKTLRK RSSKIYFRNP MAENSKFFKK HGIRNGINPA MYQSPMRLRS STIQSSSIIL LDTLILLTENE GDKTEEQVSY	Homo sapiens
					accgcgcga ggtaggcgt ctggtgcttg cggaggacgc ttccttcctc agatgcacgc A atctcccca tactgccttt ggagcgcta gattgctagc cttggctgct ccatggcct gccttgccc ttacctgccg attgcataag aactctctt ctgtctgtac atcgttgtcg tcggagtcgt cgcgacgtc gtggcgctcg tgtgatggcc ttgcgtccgt tagagtagtg tagttagtta ggggccaacg aagaagaaag aagacgcgat tagtgacagag atgctggagg tggtcagtta ctaagctaga gtaagatagc ggagcgaaaa gagccaaacc tagccggggg gcgcacggtc acccaaggga ggtcgactcg ccggcgcttc ctatcgcgcc gagtcctc cattcctctc cctccgccga ggcgcgaggt tgcggcgcg agcgacgcgc agctcagcgc accgactgcc gggggtcccg ctgggcgatt gcagccgagt cgtttctcgc tctagctgcc gccggggcga cgcgtgcctg gtcttctcc cggacgctag tgggttatca gctaacacc gcgagcatct ataacatagg ccaactgacg ccatacttca aaacaacta aaggatgata tgatgaacct agcctgttaa ttctgtcttc tcaatttaa acttgggtg ctaagactg aagcaatcat ggtgaacctg aggaatggg tgcattcatt cctgtgcac ctaattggcc tattggttg gcaatgtgat atttctgtga gccagtagc agctatagta actgacattt tcaatacctc cgatgggtga cgttcaaat tccagacgg ggtacaaaa tggccagcac tttcaatcgt catcataata atcatgacaa taggtggcaa ctctcttggt atcatggcag taagcatgga aaagaaactg cacaatgcc aacttactt ctaaatgtcc ctgaccattg ctgatatgct agtgggacta ttgtcatgc cctgtctct cctggcaatc ctttatgatt atgtctggcc actacctaga tttttgtgc cgtctggat ttctttagat gttttatttt caacagcgtc catcatgcac ctctgcgcta tatcgctgga tgggtatgta gcaataccta atcctattga gcatagccgt ttcaattcgc gactaaagg catcatgaag attgctattg tttgggcaat ttctataggt gtatcagttc ctatccctgt gattggactg agggacgaag aaaagggtgt cgtgaacaa acgacgtggc tgctcaaca ccaaatctt gtctttattg ggtccttcgt agctttcttc ataccgtga cgattatggt gattacgtat tgcctgacca tctacgttct ggcgcgacaa gctttgatgt tactgcacgg ccacaccgag gaaccgcctg gactaagtct ggatttcctg aagtgcctga agaggaatac ggccgaggaa gagaactctg caaacctaa ccaagaccag aacgcacgc gaagaaagaa agctctgga agtcttggg attgtttct gcaccatgca ggctatcaac aatgaaagaa agcttctgaa tattctgctt gtctttgtg ttgtgtttct gatcatgtgg tgccatttt tcattaccaa tattctgtct gtctttgtg agaagtcctg taaccaaaag ctcatggaaa agcttctgaa tgtgtttgtt tggattggct atgtttgttc aggaatcaat cctctgtgtgt atactctgtt caacaaaatt taccgaaggg cattctccaa ctatttgcgt tgcaattata aggtagagaa aaagcctcct gtccaggcaga ttccaagagt tgcgcacct gctttgtctg ggaggagagt taatgttaac atttatcggc ataccaatga accggtgac gagaaagcca gtgacaaatga gccgggtata gagatgcaag ttgagaattt agagttacca gtaaatccct ccagtggtgt tagcgaaagg attagcagt tgtgagaaag aacagcacag tcttttctta cggtaacaag tacatatgta ggaataattt cttctttaat tttctgtgtg gtcttaacta atgtaaatat tgctgtctga aaaagtgtt	A

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aatctctct ctttgtcaaa tggatatttt tgtgaatggt tgcgaagtgt tgtcttattc

16	134	5-HT2C Receptor	NP_000859.1	ctaatctcgt tatgttatcc actacaggtt ttatgagact tcctattaat ttattaaatt tattaaatgt tgaaaaaaa aaaaaaaa aaaa MVNLRNAVHS FLVHLIGLLV WQCDISVSPV AAIVTDIFNT SDGGRFKFPD GVQWNPALSI P VIIIIMTIGG NILVIMAVSM EKKLHNATNY FLMSLAIDM LVGLLVMPLS LLAILYDYVW PLPRYLCPVW ISLDVLFSTA SIMHLCAISL DRYVAIRNPI EHSRFSRRTK AIMKIAIWA ISIGSVPIPV VIGLRDEEKV FVNNTTCVLN DPNEVLIGSF VAFFIPLTIM VITYCLTIYV LRRQALMLLH GHTEEPGLS LDFLKCKRN TAEENSANP NQDONARRR KKRRPRGTM QAINNERKAS KVLGIVFFVF LIMWCPFFIT NILSVLCEKS CNQKLMKLL NVFVWIGYVC SGINPLVYTL FNKIYRRAFS NYLRCNYKVE KKPPVRQIPR VAATALS GRE LVNVIYRHTN EPVIEKASDN EPGIEMQVEN LELPVPNPSSV VSERISSV	Homo sapiens
17	136	5-HT4 Receptor	NM_000870	cggtgcttat ttcctgtaat ggacaaactt gatgctaatt tgagttctga ggagggtttc A gggtcagtggt agaaggtggt gctgctcacg tttctctcga cggttatcct gatggccatc ttggggaacc tgctggtgat ggtggctgtg tgctgggaca ggcagctcag gaaaataaaa acaaattatt tcattgtatc tcttgctttt gcggatctgc tggtttcggt gctggtgatg ccctttggtg ccattgagct ggttcaagac atctggattt atggggaggt gttttgtctt gttcggacat cctcggacgt cctgctcaca acggcaccga tttttcacct gtgctgcatt tctctggata ggtattacgc catctgctgc cagcctttgg tctataggaa caagatgacc cctctgcgca tcgcattaat gctgggaggtc tgctgggtga tccccacgtt tattctttt ctccctataa tgcaaggctg gaataacatt ggcataaattg attgataga aaagaggaag ttcaaccaga actctaactc tacgtactgt gctcttcattg tcaacaagcc ctacgccatc acctgctctg tgggtggcctt ctacatccca tttctctca tgggtctggc ctattaccgc atctatgtca cagctaagga gcatgccccat cagatccaga tgttacaacg ggcaggagcc tctccgaga gcaggcctca gtcggcagac cagcatagca ctcatcgcat gaggacagag accaaagcag ccaagaccct gtgcatcctc atgggttgct tctgctctg ctgggacca ttctttgtca ccaatattgt ggatcctttc atagactaca ctgtccctgg gcaggtgtgg actgctttcc tctggctcgg ctatatcaat tccgggttga accttttct ctacgccttc ttgaataagt cttttagacg tgccttcctc atcatcctct gctgtgatga tgagcgctac cgaagacctt ccattctggg ccagactgtc ccttggttcaa ccacaacct taatgatcc acacatgtac taaggatgc agtgagtggt ggtggccagt gggagagtca gtgtcaccg ccagcaactt ctcccttggt ggctgctcag cccagtgaca cttaggcccc tgggacaatg acccagaaga cagccatgcc tccgaaagag ggccaggtcc taagctgctg cttgtgcgcg actgcaccgg gcattctctt cactgaggtc tttccgtcgg ccaagtgcag aaccgggtgc tcgctggg	Homo sapiens
18	136	5-HT4 Receptor	NP_000861.1	MDKLDANVSS EEGFGSVEKV VLLTFLSTVI LMAILGNLLV MVAVCWDROL RKIKTNYFIV P SLAFADLLVS VLMPFPGAIE LVQDIWIYGE VFCLVRTSLD VLLTTASIFH LCCISLDRIY AICCCQLVYR NKMTPLRIAL MLGGCWVPT FISFLPIMQG WNNIGIIDLI EKRFENQNSN STYCVFMVVK PYAITCSVVA FYIPFLMLVL AYYRIYVTAH EHAHQIOMLQ RAGASESRP QSADQHSRTH MRTEKAAKT LCIMGCFCL CWAPFFVTNI VDPFIDYVTP GQVWTAFLWL GYINSGLNPF LYAFLNKSR RAFLLILCCD DERYRRPSIL GQTVPCSTTT INGSTHVLRD AVEGGQWES QCHPPATSPL VAAQPSDT	Homo sapiens
19	138	5-HT6	NM_000871	cccgagagcg cccattcacc ccctcacc accctccccg gttccccactt ccccgactc A	Homo

sapiens

Receptor

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 gcagagctga cccctgctg ccactccag gcccttacc tgcaggatc atagctgact
 caga

Homo sapiens

Receptor

NP_000862.1 NP_000862.1 MYPEPGTAN STPAWGAGPP SAPGGGWA AALCVIALT AANSLIAL ICTQPALRNT P
 SNFFLSLFT SLMVGLVVM PPAMNLALYG RWVLARGLCL LWTAFDVMCC SASILNLCIL
 SLDRYLLILS PLRYKLRTMP LRALALVLA WSLAALASFL PLLGWHELG HARPPVPGQC
 RLLASLPFVL VASGLTFELP SGAICFTYCR ILLAARKQAV QVASLTGMA SQASETQVFP
 RTRPRGVESA DSRRLATKHS RKALKASLTL GILLGMFFVT WLPFFVANIV QAVDCISPG
 LFDVLTWLG CNSTNPIIY PLFMRDFKRA LGRFLPCPRC PRERQASLAS PSIRTSHSGP
 RPLSLQQLV PLPLPPDSDS DSDAGSGGSS GLRLTAQLLL PGEATQDPPL PTRAANAANV
 FNIDPAEPPEL RPHPLGIPTN

21	139	5-HT7 Receptor	NM_000872	ccatgggcag cggcacacgg cggcgcgatg atggacgtta acagcagcgg ccgcccggac A ctctacggc acctccgctc ttctctctg ccagaagtgg ggcgcgggct gcccgacttg agccccagc gtggcgccga cccggtcgcg ggtcctctgg cgcgcacact gctgagcgag gtgacagcca gcccgcgcc cactgggac ggcgcgcgg acaatgcctc cggctgtggg gaacagatca actacggcag agtcagaaa gtgtgatcg gctccatcct gacgtcctc acgtgctga cgatcgcggg caactgcctg gtggtgatct ccgtgtgctt cgtcaagaag ctcgcgcgc cctccaacta cctgatcggtg tccctggcg tggcgacact ctcggtggct gtggcggtca tgcctctcgt cagcgtcacc gacctcatg ggggcaagtg gatctttgga cactttttct gtaatgtctt catcgccatg gacgtcatgt gctgcacggc ctcgatcatg acctgtgcg tgatcagcat tgacaggtag cttgggatca caagggccct cacataccct gtgaggcaga atgggaaatg catggcgaag atgattctct ccgtctggct tctctcggc tccatcacct tacctccact ctttggatgg gctcagaatg taaatgatga taaggtgtgc ttgatcagcc aggaacttgg ctatacgatt tactctaccg cagtggcatt ttatatcccc atgtccgtca tgcctttcat gtactaccag attacaagg ctgccaggaa gagtgtgctc aaacacaaat tctctggctt cctcagatg gagccagaca ggcgtcatcg cctgaatggc atagtgaagc tcagaaagga ggtggaagag tgtgcaaac ttcgagact cctcaagcat gaaaggaaa acatctccat ctttaagcga gaacagaaag cagccaccac cctggggatc atcgtcgggg cctttaccgt gtgctggctg ccatttttcc tctctcgac agccagaccc ttcatctgtg gcaactcctg cagctgcac ccatgtggg tggagaggac atttctgtg ctaggctatg caaactctct cattaaacct ttatatatg ccttcttcaa ccgggacctg aggaccacct atcgcagcct gctccagtgc cagtaccgga atatacaacc gaagctctca gctgcaggca tgcataagc cctgaagctt gctgagaggc cagagagacc tgagtttctg ctacaaaaatg ctgactactg tagaaaaaa ggtcatgatt catgattgaa agcagaacaa tgag	Homo sapiens
22	139	5-HT7 Receptor	NP_000863.1	MMDVNSSGRP DLYGHLRSFL LPEVGRGLPD LSPDGGADPV AGSWAPHLLS EVTASPAPTW P DAPPDNASGC GEQINYGRVE KWIGSILTL ITLLTIAGNC LVVISVCFVK KLRQPSNYLI VSLALADLSV AVAVMPFVSU TDLIGGKWF GHFFCNVFA MDVMCTASI MTLCVISIDR YLGITRPLTY PVRQNGKMA KMILSVLLS ASITLPLFG WAQNVNDDKV CLISQDFGYT IYSTAVAFYI PMSVLMFY QIYKAARKSA AKHKFPGFPR VEPDSVIALN GIVKLQKEVE ECANLSRLK HERKNISIFK REQKAATTIG IIVGAFTVCW LPFFLLSTAR PFICGTSCSC IPLWVERTEL WLGVANSLIN PFIYAFENRD LRTTYRSLQ COYRNINRKL SAAGMHEALK LAERPERPEF VLQADYCRK KGHDS atgagtgta gaagtgtgaa ggggtgcctgt tctgaatccc agagcctcct ctccctctgt A gaggctggca ggtgaggaag ggtttaacct cactggaagg aatccctgga gtagcggct gctgaaggcg tgcaggtgtg ggggcacttg gacagaacag tcaaggcagcc gggagctctg ccagctttgg tgacctggg cggggctggg agcgtgctgg cgggagccgg aggaactatga gctgccgcgc gttgtccaga gccagccca gccctacgcg cgcggcccg agctctgttc cctggaactt tgggcactgc ctctgggacc cctgcggcc agcaggcagg atggtgcttg cctcgtgccc ctggtgccc gtctgctgat gtgccagcc tgtgcccgcc atgccgccct ccatctcagc ttccaggcc gcctacatcg gcatcgaggt gctcatcgcc ctgggtctctg tgccccggaa cgtgctggtg atctggggcg tgaaggtgaa ccaggcgctg cgggatgcca	Homo sapiens
23	272	Adenosine A1 Receptor	NM_000674	atgagtgta gaagtgtgaa ggggtgcctgt tctgaatccc agagcctcct ctccctctgt A gaggctggca ggtgaggaag ggtttaacct cactggaagg aatccctgga gtagcggct gctgaaggcg tgcaggtgtg ggggcacttg gacagaacag tcaaggcagcc gggagctctg ccagctttgg tgacctggg cggggctggg agcgtgctgg cgggagccgg aggaactatga gctgccgcgc gttgtccaga gccagccca gccctacgcg cgcggcccg agctctgttc cctggaactt tgggcactgc ctctgggacc cctgcggcc agcaggcagg atggtgcttg cctcgtgccc ctggtgccc gtctgctgat gtgccagcc tgtgcccgcc atgccgccct ccatctcagc ttccaggcc gcctacatcg gcatcgaggt gctcatcgcc ctgggtctctg tgccccggaa cgtgctggtg atctggggcg tgaaggtgaa ccaggcgctg cgggatgcca	Homo sapiens

ccttctgctt catcgtgtcg ctggcggtgg ctgatgtggc cgtgggtgccc ctggtcatcc
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[illegible]

26	273	Adenosine A2a Receptor	NP_000666.2	MPIMGSSVYI PFAITISTGF AKGIIAICWV NFFACVLVPL LFALCWLP KIIRSHVLQ YALGLVSGGS	TVELAIAVLA CAACHGCLFI LSFAIGLTPM LMLGVYLRI IINCFTFFCP QEPFKAAGTS AQESQNTGL	ILGNVLVCWA ACFVLVLTQS LGNWNCQPK FLAARRQLKQ DCSHAPLWLM ARVLAHGS PDVELLSHEL	VWLNSNLQNV SIFSLAIAI EGKNSQCGG MESQPLPGER YLAIVLSHTN GEQVSLRLNG KGVCPEPPGL	TNYFVVS DRYIAIRIPL EGQVACLFED ARSTLQKEVH SVNPFYIAY HPPGVWANGS DDPLAQDGAG	P RYNGLVTGTR VWPMNYMYF AAKSLAIIVG RIRFRQTFR APHERRP VS	Homo sapiens
27	274	Adenosine A2b Receptor	NM_000676	gggcaatttg ccccgcg cgggcggg gtcccgcca ggcgctatg tagggggc acgtggcg ccgcgggtg ctgcggcga gcttctgcac agagctccat cgctcaggta gggtccttgc ccaccaacaa agtgtctctt gtgttctg gcaggcagct tccatgcagc tgcattgctg gggcaatgaa atgcttaccc tctgccaagc tgggcctatg agaggacacg ctctcttgag aggctccaa atgccaacacg atggtggaaa tactttttta	ttagttatcc gcgcgaactt cgcgggccaa ccagcgcccc ccatgccccg ccggggccca ggagctggtc cagcggaac cgtggccgtg tgacttctac cttcagcctt taaaagtgtg ctttggcatc ctggacagaa tgagaatgtg cccactgctt tcagcgcaat caagtccactg taactgtgtc tatggccatt gaaccgagac agatgtcaag atctaggctc gctgggtttc cacttccctg gattgacaaa cttgaatgga attactgaaa cttagaggga	gccgcacca tgggctcggg tgggtgcgc agccccgag cgggtctcac cctggccccg cctggccccg atgcgcgcg gttcggcgc actctgcaga gggtctcttc ggctgcctct ctggccgtgg gtcacgggga ggattgactc ccctgggatg gtccccatga ataatgctgg gagctgatgg gccatgattg actcttttcc cttctgtcac ttccgctaca agtgggaatg tcaggctgg caggagaaga atagtacac gagctaccac tatatttatg tataatttatg ttctaacaga ctcttttgtt ctgaacacag gtgaacacag aaaagtgtgac	accggagggg gtgctccg cggggggcc gcagcgag ctcgcccc ctcgcccc ggagacacag gggcaacgtg ctacttctg tgccatcacc cttcgtgctg ataccggcc aggggtcatt gtggaacagt tgaaagctgc atatttcaat taagatcttc gaccacctc tgccctgtgc gggttaacctg gggtaaaaat agcccaagt agttgtcaat ccattgtct aggatatctc gctctcgggtg caagaacaa aatggactgc tgtcagtagt tgtgtggatt tgccttgttt ataatgcaaa atg	A cagccccgaga cgacccgtg gcgcggtccg gcgccctcgg gacgcgctgt ctgggtgctg gtgtccctg atcagccctg gtgtcacgc atctgtgtcc gctgtccct aaagacagt tgccttgtga ttctttgggt ctgggtgctc cagcgggaga tggttacctg agcccaagt ccattgtct aggatatctc gctctcgggtg caagaacaa aatggactgc tgtcagtagt tgtgtggatt tgccttgttt ataatgcaaa atg	Homo sapiens	

28	274	Adenosine A2b Receptor	NP_000667.1	MLETQDALY VALELVIAAL SVAGNVLVCA AVGTANTLOI PTNYFLVSLA AADVAVGLFA P IPFAITISLG FCTDFYGCLEF LACEVLVLTQ SSIFSLAVA VDRYLAICVP LRYKSLVTGT RARGVIAVLW VLAFIGIGLTP FLGWSKDSA TNNCTEPWDG TTNESCCLVK CLFENVVPMMS YMYVFNFFGC VLPPLLIMLV IYIKIFLVAC ROLQRTLEMD HSRTTLQREI HAAKSLAMIV GIFALCWLPV HAVNCVTLFQ PAQGNKPKW AMNMAILLSH ANSVVNPIVY AYRNRDFRYT FKHIIISRYLL CQADVKSNG QAGVQPALGV GL	Homo sapiens
29	275	Adenosine A3 Receptor	NM_000677	atctttgtctg caaaggctgg gtatcgctgg tgctcagcaa agcgctcaact cgtgcaagaa A cttagcagga atagttcttg ctaaggtttag gaggtgcca ccaaagtctc tttttgttc ctctgcttct cccgtttgccc tcttatcat gagatctttt tgctaagctg gcagaaagat tgcatagtca gtgcttccag ctctgctccc acctgacct gcactgtcct ctggtccctg aatgaatgaa ctctgatacc caatctgtc tcgagcctc tctatgccac tcatggctcc tcttctgtc tttccatctt ttgtctgaga gtcttatct tgatggaact caaaaagcca tctcacttcc tgaacacccc ctgaagaggg ttgcttatct tgatggaact caaaaagcca aaaagctgca ggcagagggc ttgaggacat ctgtttgggg aactaagagc agcagcactt tcagattcag tccatataga gctgtcctac agcattctgg aaacttgagg atgtgcggtg cataaaaggg ctggaagtga cccacctgtg atgagccct tctaaggaga agggtttcca agagatcacc ccaccagaaa aggttaggaa tgagcaagt gggaatttta gactgtcact gcacatggac ctctgggaag acgtctggcg agagtaggc ccaactggccc tacagacgga tcttctggc tcacctgtcc ctgtggaggt tcccctggga aggcaagatg cccaacaaca gcactgctct gtcattggcc aatgttaact acatcacat ggaattttc attggactct gcgccatagt gggcaacgtg ctggtcatct gcgtggtcaa gctgaacccc agcctgcaaga ccaccacct ctatttcatt gtctctctag cctggctga cattgtgtt ggggtgctgg tcatgcctt ggccattgtt gtcagcctgg gcatcacaat ccacttctac agctgcctt ttatgacttg cctactgctt atctttaacc acgctccat catgtccttg ctggccatcg ctgtggaccg atacttgcg gtcaagctta ccgtcagata caagaggggtc accactcaca gaagaatatg gctggccctg ggcctttgct ggctgggtg atctctgggtg ggattgaccc ccatgttttg ctggaacatg aaactgacct cagagtagca cagaaatgtc accttccctt catgccaatt tgtttccgtc atgagaatgg actacatggt atacttcagc ttcctcaact ggattttcat cccctgggtt gtcattgctg ccatctatct tgacatcttt tacatcattc ggaacaaact cagtctgaac ttatctaact ccaaagagac aggtgcattt tatggacggg agttcaagac ggctaagtcc ttgtttcttg tcttttctt gttgtctctg tcatggctgc ctttatctat catcaactgc atcatctact ttaatgggtg ggtaccacag cttgtgctgt acatgggcat cctgctgtcc catgccact ccatgatgaa cctatcgtc tatgcttata aaataaagaa gttcaaggaa acctacctt tgatcctcaa agcctgtgtg gtctgccatc cctctgattc ttggacaca agcattgaga agaattctga gtatgtatcc atcagagatg actctgtctc attgacctc agattcccca tcaacaaaca cttaggggcc tgtatgcctg ggccaaggga tttttacatc cttgattact tccactgagg tgggagcatc tccagtgtc cccaattata tctccccac tccactactc tcttctcca ctcatcttt ccttgtcct ttctctctaa ttcagtgttt tggaggcctg acttggggac aacttattat tgatattatt gtctgttttc cttcttccca atagaagaat aagtcattgga gcctgaaggg tgcctagtgtg acttactgac aaaaggctct agttgggctg aacatgtgtg tgggtgtgac tcatttccat	Homo sapiens

30	275	Adenosine A3 NP_000668.1 Receptor	gccattgtgg aattgagcag agaacctgct ctggaggat gctagaaga tgttggaac agaagaaata aactgagttt aagggggact taaactgctg aattcacctg tggatgtttt tgagtaataa aaagctaata g VGNSTALSL ANVTYITMEI FIGLCAIVGN VLVCVVKLN PSLQTTTFVF IVSLALADIA P VTHRRWLAL LGLCWLSFL VSLGITHF YSCLEMTCLL LIFTHASIMS LLAIADRYL RVKLTVRYKR SEFTWIFPL VVMCAIYLDI FYIIRNKLSL NLSNSKETGA FYGREFKTAK SLFLVLFLFA LSWLPISIIN CIIYFNGEVP QLVLYMGILL SHANSMMNPI VYAYKIKKFK ETYLLILKAC VVCPSDSL TSIEKNSE	Homo sapiens
31	309	Melanocortin NM_000529 2 Receptor (adrenocorti cotropic hormone) (MC2R)	atgaagcaca ttataaactc gtagaataac atcaacaaca cagcaagaaa taattccgac A tgtctctgtg tggttttgccc ggaggagata tttttcaca ttccattgtg tggagttttg gagaatctga tegtctgtc ggctgtgttc aagaataaga atctccaggc acccatgtac tttttcatct gtagcttggc catatctgat atgtctggga gctatataa gatcttggaa aatatcctga tcatattgag aaacatgggc tatctcaagc cagctggcag ttttgaaacc acagccgatg acatcatcga ctccctgttt gtcctctccc tgcttggctc catcttcagc ctgtctgtga ttgctgcgga ccgctacatc accatcttcc acgcactcgg gtaccacagc atcgtgacca tgcgcgcgac tgtgtgtgtg cttacggtca tctggacgtt ctgcacgggg actggcatca ccatgtgtgat cttctcccat catgtgccc cagtgatcac cttcacgtcg ctgttcccg ttagtctggt cttcatcctg tgctctatg tgcacatgtt cctgctggct cgatcccaca ccagggaagat ctccaccctc ccagagcca acatgaaagg ggccatcaca ctgaccatcc tgcctggggt cttcatcttc tgcctggccc ccttctgtct tcatgtctc ttgatgacat tctgcccag taaccctac tgcctctgt acatgtctct cttccagggtg aacggcatgt tgatcatgtg caatgccgtc atgaccctc tcatatgc cttccggagc ccagagctca gggacgcatt caaaaagatg atcttctgca gcaggtactg gtag FFICSLAISD MLGSLYKILE NILIILRMNG YLKPRGSFET TADDIISLF VLSLLGSIFS LSVIAADRYI TIFHALRYHS IVTMRRTVV LVITWTFCTG TGITMVFISH HVPTVITFTS LEPLMLVFIL CLYVHMFLLA RSHTRKISTL PRANMKGAIT LTILLGVFIF CWAPFVLHVL LMTFCPSNPY CACYSLSFQV NGMLIMCNAV IDPFIYAFRS PELRDAFKKM IFCSRYW	Homo sapiens
32	309	Melanocortin NP_000520.1 2 Receptor (adrenocorti cotropic hormone) (MC2R)	tcctgcccgc cgctcgttct gtgcccccg cccggccacc gacggccggc cgttgagatg A actttccgcg atctctctgag cgtcagtttc gagggacccc gcccgacag cagcgacagg ggctccagcg cgggcgcgcg cgggggcagc cggggcgcgcg cggccctc ggagggcccc gcggtggcg gcgtgccggg ggccgcggc ggccgcggcg cgtggtggg cgcaggcagc ggcaggaca accggagctc cgcgggggag cgggggagcg cggcgcggg cggcgacgtg aatggcacgg cggccgtcgg ggagctggtg gtgagcgcgc agggcgtggg cgtggcgctc ttcctggcag ccttcacct tatggccgtg gcaggtaac tcttctcat cctctcagt gcctgcaacc gccacctgca gaccgtcac aactattca tctgtaacct ggcctggcc gacctgtgc tgagcggcac cgtactgcc ttctcgcca ccatggaggt tctgggcttc tgggctttg gccgcgctt ctgcgacgta tgggcccgg tggacgtgct gtgctgcag gcctccatcc tcagcctctg caccatctcc acgtggcggt acgtggcggt gcgccactca	Homo sapiens
33	376	Alpha 1d- nm_000678 adrenoceptor		Homo sapiens

Accession	Gene	Protein	Species
34	Alpha 1d-adrenoceptor	NP_000669.1	Homo sapiens
376	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
377	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
378	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
379	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
380	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
381	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
382	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
383	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
384	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
385	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
386	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
387	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
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390	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
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392	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
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394	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
395	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
396	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
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399	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens
400	Alpha 1b-adrenoceptor	NM_000679	Homo sapiens

36 377 Alpha 1b- NP_000670.1 MNPDLDTGHN TSAPAHWGEL KNAFTGPNQ TSSNSTLPQL DITRAISVGL VLGAFLFAI P Homo sapiens
adrenoceptor

atcctagtc tcttgtctgt ggctgcaac cggcacctgc ggagccccc caactactc
attgtcaacc tggccatggc cgacctgtg ttgagcttca cgtcctgccc cttctcagcg
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cgtgcgagc tttcttccc tggggaggaa aacatcgtg ggggga

37 379 Alpha 1c- NM_000680 Homo sapiens
adrenoceptor

gaattccgaa tcatgtgcag aatgtgaat cttccccag ccaggacgaa taagacagc A
cggaaaagca gattctcgtg attctggaat tgcattgtgc aaggagtctc ctggatcttc
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38	Alpha 1c- adrenoceptor	NP_000671.1	<p> ccaaccgccc gcaccgggtga acatttccaa ggccattctg ctccggggtga tcttggggggg cctcattctt ttcgggggtgc tgggtaacat cctagtgtac ctctccgttag cctgtcacccg acacctgcac tcagtcacgc actactacat cgtcaacctg gcgggtggccg acctcctgct cacctccacg gtgctgccct tctccgccat cttcgagggtc ctagggtact gggccttcgg cagggtcttc tgcaacatct gggcggcagt ggatgtgctg tgctgcaccg cgtccatcat gggcctctgc atcatctcca tcgaccgcta catcggcgtg agctaccgcg tgcgtaccc aaccatcgtc accagagga ggggtctcat ggctctgctc tgcgtctggg cactctccct ggtcatatcc attgacccc tgttcgggtg gaggcagcgg gcccccagg acgagaccat ctgccagatc aacgaggagc cgggctacgt gctcttctca gcgtgggtc cctctacct gcctctggcc atcatcctgg tcatgtactg ccgctctac gtggtggcca agaggagag ccggggcctc aagtctggcc tcaagaccga caagtcggac tcggagcaag tgacgtccg catccatcgg aaaaacgccc cggcaggagg cagcgggatg gccagcgcca agaccaagac gcacttctca gtgaggctcc tcaagttctc ccgggagaag aaagcgcca aacgctggg catcgtggtc ggtgcttctg tctctgctg gctgcctttt ttcttagtca tgccattgg gtcttcttc cctgatttca agcctctga aacagttttt aaaaatagtat ttggctcgg atatctaaac agtgcatac accccatcat ataccatgc tccagccaag agttcaaaaa ggcctttcag aatgtcttga gaatccagt tctccgaga aagcagctt ccaaacatgc cctgggtac accctgcacc cggccagcca ggccgtggaa gggcaacaca aggacatggt gcgcatcccc gtggatcaa gagagacctt ctacaggatc tccaagacgg atggcgtttg tgaatggaaa tttttctctt ccattgcccc tggatctgcc aggattacag tgtccaaaga ccaatcctcc tgtaccacag cccgggtgag aagtaaaagc ttttggagg tctgctgctg tgtagggcc tcaacoccca gccttgacaa gaaccatcaa gtccaacca ttaagggtcca caccatctcc ctacgtgaga acggggagga agtctaggac aggaagatg cagaggaaag gggaataatc ttaggtacct accccactc ctctcggaa ggcagctct tcttgagga caagacagga ccaatcaaa aggggacctg ctgggaatgg ggtgggtggt agaccaact catcaggcag cgggtagggc acagggaaga gggagggtgt ctcaacacca accagttcag aatgatacgg aacagcattt ccctgcagt aatgcttct tggctactct gtgccactt caacgaaaac caccatggga aacagaattt catgcacaa ccaaaagact ataaatatag gattatgatt tcatcatgaa tattttgagc acacactcta agtttgagc tatttcttga tggaagtgag gggattttat tttcaggctc aacctactga cagccacatt tgacatttat gccggaattc </p>	Homo sapiens
379			<p> SSNCTOPPAP VNISKAILLG VIIGGLILFG VLGNILVILS VACHRHLSV P THYIYINLAV ADLLTSTVL PFSAIFEVLG YWAFGRVFCN IWAADVLC TASMGLCII SIDRYIGVSY PLRYPTIVTQ RRLMALLCV WALSLVISIG PLFGWRQAP EDETICQINE EPGYVLFSAI GSFYLPALII LMVYCRVYV AKRESRGLKS GLKTDKSDSE QVTLRIHRKN APAGSGMAS AKTKTHFSVR LLKFSREKKA AKTLGIVVGC FVLCWLPFFL VMPIGSFFPD FKPSETVFKI VFWLGYLNSC INPIIYPCSS QEFKAFQNV LRIQCLRRKQ SSKHALGYTL HPPSQAVEGQ HKDMVRIPVG SRETFYRISK TDGVCEWKFF SSMPRGSARI TVSKDQSSCT TARVRSKSFL EVCCCVGPST PSLDKNHQVP TIKVHTISLS ENGEEV gcgctcgccg ccacacaggc ggacgcccag gagaaccctt gcctccgctcg cggtcctctgg A agagctgac gtccacctgc cccggcccg ctaggagcgg ggggtgccttc atgcggcccc </p>	Homo sapiens
39	Alpha 2a- adrenoceptor	NM_000681		

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40	387	Alpha 2a- adrenoceptor	AAA51664.1	ggtcaaaa ggtaaatgga tgggggttac ctaggccctgg ctaattcccc ttccattccc aactctctct ctctttttga agaaaaatgc taagggcagc cctgcctgcc ctccccatcc cccgctgtaa atatacata tttttgatag cacacatggg gcccecatat ctcttgacct tgggtttgat gttgaaatcc tggccctggg agagatgcct tccaggcaga cacagctgac tgggtcaggc caagccctt tgcaaatgcaa gccctttctg gtgttatgaa gtccctctat gtcgtcgttt tcaccagcaa ctggtgactg tcccttcgac acggacctgc tttagagattt cctgacaggg aaaagatttc tgtccatttt tttcctgtgc ctaacagcat aattgccttt tccatgtaa atattatgat ggtggatcaa gacataagta aatgagcctt tctgcctcac atcagccctg tgtataaagc cattattctc tgatgcactg tttgccccag taactcactt taaaacctct cttccagtg tccctctct cctccaggg ccactgcttg aagaagaata tgtatgtttc tatctttat gtctgtgagc cctcctgccc cgaagtgc tgcattatggg gaaatctttt agctgctgtt tttagactcc aaggagtga aattatgtgg aagaagcaaa cctgatacaa tttgcccag gtaaacagtt tgaagaaga aatgggacctg ccaaacgtga cagtttcttc cccaagagct gttaggtatc aaaaatgttg cctttcccc ctccgtgctt ttctggttga gatcatgtca ttgatgaact gccaagtca ggggagagg gacagactt tgtgtttaca tctgcatttc tacatgtttt agacagagac aatttaaggc ctgcactctt atttcactaa agaaaaacta atgtcagcac atgttgctaa tgacagtga tttttttta aataaaaaag tttacagatc aaatgtgaaa taaatatgaa tggagtgtc aaa MGLQPDAGN ASWNGTEAPG GGARATPYSL QVTLTLVCLA GLMLLTVEG NVLVIIVFT P SRALKAPQNL FLVSLASADI LVATLVIPFS LANEVWGYY FGKTWCEIYL ALDVLFTSS IVHLCAISLD RYWSITQAE YNLKRTPRRI KAIITCWVI SAVISFPPLI SIEKGGGGG PPAEPRCEI NDQKWYVISS CIGFFAPCL IMILVYVRIY QIAKRRTRVP PSRRGPDAVA APPGGTERRP NGLPERSAG PGGAEEPLP TQLNGAGPEP APAGPRDTDA LDLEESSSD HAERPPGPRR PERGPRGKG ARASQVKPGD SLRGAGRRR GSGRRLOGRG RSASGLPRRR AGAGGNLEK RFTFVLAVI GVFWVWFPP FTYTLTAVG CSVPRTLEKF FWFYGCNSS INPVIYTIEN HDFRAFKKI LCRGDRKRIV	Homo sapiens
41	388	Alpha 2b- adrenoceptor	NM_000682	atggaccacc aggacccta ctccgtgcag gccacagcgg ccatagcggc ggccatcacc A ttctcattc tctttaccat ctctggcaac gctctggtca tcttggtgtg ttgaccagc cgctcgtgc gcgacctca gaacctgttc ctggtgtcgc tggccgcccgc cgacatcctg gtggccacgc tcatcatccc tttctcgtg gccaacgagc tcttggtgcta ctggtacttc cggcgacagt ggtgcgaggt gtacctggcg ctgcagctgc tctctgcac ctgctccatc gtgcacctgt gcgccatcag cctggaccgc tactgggccc tgaagccgcg gctggagtac aactccaaag gcaccccgcg ccgcataaag tgcatactcc tcaactgttg gctcatcgcc gccgtcatct cgctgcgccc cctcatctac agggcgacc agggccccc gccgcgagg cgccccagt gcaagctcaa ccaggaggcc tgggtacatcc tggcctccag catcgatct ttctttgtc cttgcctcat catgatcctt gtctacctgc gcatctacct gatcgccaaa cgagcaacc gcagaggtcc cagggccaa ggggggacct ggcagggtga gtccaaagcag ccccgacctg acctggtgg ggctttggcc tcagccaaac tgcagacctt ggcctctgtg gtcttgcca gagaggtcaa cggacactcg aagtccactg gggagaaagga ggagggggag accttgagg atactgggac cggggccttg ccaccagtt gggctgacct tcccaactca ggccagggcc agaaggaggg tgtttgtggg gcactctccag aggatgaagc tgaagaggag	Homo sapiens

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adrenoceptor	Alpha 2c- adrenoceptor	389	43	NM_000683	sapiens	Homo sapiens
VATLIIPFSL ANELLYGYWF RRTWCEVYLA LDVLFCTSSI VHLCAISLDR YWAVSRALEY	ctgcaggcgg cctctggaggg ggcgcctctcg cccgagcgcg ccccgccgccc ggcgcccccg					
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ASAREVNGHS KSTGEKEGE TPEDTGTAL PPSWAALPNS GQGQKEGVCG ASPEDEAEFE	cccaagttag aagccgacgc caggcgcccg cactcgcgccc cagcagagggc ggcggcgggc					
EEEEEEEEEC EPQAVPVSPA SACSPPLOQP QGSRVLATLR GQVLLGRGVG AIGGQWRRRR	gcggcgggcg agctccggcg agcgaggcgg gcgcgcgacg cggcccgacg accgcggggg					
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	cgctcgccc cgggtgggc tccgggaccg cggggcccgt cggcaccgc cgtcggccc					
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	cgcgccccg cagcaggcgg cgtgcgggc gccgacccc gctggggggc gccgagctg					
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	ctctcgcgcg ccagctcgcg ctccgctcag tctctcctgt cgcgcggcg ccggggcgcg					
	agcagcgtgt gccgcgcaa ggtggcccc gcgcgcgaga agcgttccac ctttgtgctg					

Alpha 2c-
adrenoceptor

Homo
sapiens

P

NP_000674.1

389

44

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QWCGVYAL DVLCTSSIV HLCALSLDRY WSVTQAVEYN LKRTPRRVKA TIVAVWLISA
VISFPPLVSL YRQPDGAAYP QCGLNDETWY ILSSCIGSFF APCLIMGLVY ARIYRVAKR
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FFWIGYCNSS LNPVIYTVFN QDFRPSFKHI LFRRRRRGRF Q

Bradykinin
B1 Receptor

Homo
sapiens

A

NM_000710

599

45

cc

ctgtgcatg catcatcctg gccccctta gagctccaat cctcaacca gagccagctc A
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cc

46	599	Bradykinin B1 Receptor	NP_000701.1	MASSWPPELE QSSNQSLFP QNATACDNAP EAWDLLHRVL PTFIISICFF GLLGNLFVLL P	Homo sapiens
				VFLPRLRLN VAEIYLANLA ASDLVFVLGL PFWAENIWNQ ENWPFGALLC RVINGVIKAN	
				LFISIFLVVA ISQDRYRLV HPMASGRQQR RQARVTCVL IMVVGLLSI PTFLLRSIQ	
				VPDLNITACI LLLPHEAWHF ARIVELNILG FLLPLAAIVF FNYHILASLR TREEVSRTRV	
				RGPKDSKTTA LILTLVAFV VAWAPYHFFA FLEFLFQQA VRGCFWEDFI DLGLQLANFF	
				AFTNSSLPV IYVFGRLFR TKWELYKQC TPKSLAPIS SHRKEIFQLF WRN	
47	600	Bradykinin B2 Receptor	NM_000623	atgtttctc cctggaagat atcaatgttt ctgtctgttc gtgaggactc cgtgccacc A	Homo sapiens
				acggcctctt tcagcgccga catgtcfaat gtcacctgc aagggccac tcttaacggg	
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48	600	Bradykinin B2 Receptor	NP_000614.1	<p>gtacatgtga ggcatacatta cgagagcgta actgggatat gttactata aggaaaagac actgaggtct agaaatagct ccgtggagca gaatcagtat tgggagccgg tggcgggtgtg aagcaccagt gtctggcaca cagtaggtgc tcattggctc ccttcacact gtcattccca ccacctgag gcccaaccg ccacacacac aggagcattt ggagagaagg ccatgtcttc aaagtctgat ttgtgatgag gcagaggaag atatttctaa tcggtcttgc ccagaggatc acagtgtga gacccccac caccagccgg tacctgggaa gggggagagt gcaggccctgc tcagggactg ttctgtctc agcaaccaag ggattgttcc tgtcaatcaa tggtttattg gaaggtggcc cagtatgagc cctagaagag tgtgaaaagg aatggcaatg gtgttcacca tcggcagtgc cagggcagca ctcatcact tgataaatga atatttatta gctggtttga gagctagaac ctggagagct agaacctgga gaactagaac ctggagggtc agaacctgga gaggctagaa ccaagaaggg ctagaacctg gaggggctag aacctagaga agctaaaacc tgagctagaa gctggaggac tagaacctgg agggctgga tctgaagggc tagaacctgg aggctggaa tctggagagc tagaacctgg agggctagaa cctggagggc tagaacctag aaggctaga acctggaggg ctggaatctg gagagctaga acctggaggg ctagaacctg gagggtaga acctagaagg gctagaacct ggagggtcag aacctggcag gttagaacct agaaggcta gaacctggag agccagaacc tggagggcta gaacctggaa gggctagaac ctgtagagct agaactgga gagctagaac ccggcaggct agaacctggc aagctagaac ctggagggaa tgaacctgga gggctagaac ctggagaatg agaaaaatct acatggcaaa gagccataa atctgacca atcctaactc gaatttttaa gcaaaagcgt gaaaaaaag attccctctc taccctcaac ccactctttt tccccaccac ccactctcct ctgctcagt aagtatctgg aggaagaaaa cagtgaaag aagaagtaaa aaccttttag tattagtatt agaaatgaag caaactgtgc cacacatggt gaatgaaaa aaaaaaaag aggtgtgtt ttgtcacaca gggcagtcac tcagcaccag agcacgtgat ggtctgagac tctcttaga gcagagctct gccgcaatgg ccattggggg atccacacct ggtctgaggg gcaactgagt ctcggggaga agagcggccc tatgcatggt tagatgccc tgataaagaa catctgtcct gtgaaagact caatgagctg ttatgttcta aacagggaagc attcacatc caaacgagaa aatcatgtaa acatgtgtct tttctgtaga gcataataaa tggatgaggt tttgcacaaa aaaaaaaaa aaa</p>	Homo sapiens
49	635	Beta-1 adrenoceptor	NM_000684	<p>tgctaccgc gcccggtctt ctgggtgtgt ccccaaccac ggcccagccc tgccacacc A cccgccccg gctccgcag ctgcggcatgg gcgcgggggt gctcgtcctg ggcgcctccg agcccggtaa cctgtcgtcg gccgaccgc tccccgacgg gcgggccacc gcggcgcgcc tgctgggtgc cgcgtcgccg ccgcctcgt tctgctcc ccacagcga agccccagc cgctgtctca gcagtggaca gcgggcatgg gtctgtgat ggcgtcatc gtgtgtctca tcgtggcggg caatgtgctg gtgatcgtg ccatcgccaa gacgcgcgg ctgcagacgc</p>	Homo sapiens

50	635	Beta-1 adrenoceptor	NP_000675.1	<p> taccacacct cttcatcatg tccctggcca gcgcggacct ggtcatgggg ctgctgggtgg tgccgttcgg ggcaccacg gtggtgtggg gccgtggga gtacggctcc tcttctgcg agctgtggac ctgagtggac gtgctgtgcg tgacggccag catcgagacc ctggtgtgtca ttgccccgga ccgtacacg gccatcacct cgccttcg catccagacc ctgctgacgc gcgcgcggc gcggggccg gtgtgcaccg tgtgggccc ctgcggccctg gtgtccctcc tgcccatcct catgactgg tggcgggcg agagcgacga ggcgccgcg tgetacaacg accccaagt ctgcgactc gtcaccaacc gggcctacg catcgctcg tccgtagtct ccttctacgt gccctgtgc atcatggcct tctgtacct gcgggtgttc cgcgaggccc agaagcaggt gaagaagtc gacagtgcg agcgccgtt cctcgccgc ccagcgccgc cgccctcgc ctgcctcgc cccgtcccg cgcgcgcgc gccgcgcga cccgcgcgc ccgcgcgcg cgcgcacc gcccgctgg ccaacggcg tgcgggtaag cggcgccct cgccctcgt ggcctacg gagcagaag cgtcaagac gctgggcac atcatggcg tcttcacgt ctgctggctg ccttcttcc tggccaaagt ggtgaaggcc ttcacccgcg agctgtgtcc cgaccgctc tctgtcttct tcaactggct gggtacgccc aactcgccct tcaaccccat catctactg cgcagcccg acttcgcaa ggccttcag gactgtctct gctgcgcgc cagggtgct cgcggcgcc acggaacca cggagaccg ccgcgcgcct cgggtgtct ggcgcgcgc ggcgcgcgc catcgcccg ggcgcctcg gacgacgag acgacgatg cgtcggggc acgcgcgcg cgcgcctgt ggcgcctgg gccgctgca acggcgggc ggcgcgac agcgactga cctggaga gccgtgcgc ccggcttcg cctcggaac caaggtgtg ggcgcgcgc gggcgcgga ctcggggcac ggcctccag gggaacgag agatctgtg tctactaaga ccgatacag gtgaactga agccacaat cctcgtctga atcatccgag gcaaaagaa aagccacgga ccgtgcaca aaaagaaa tttgggaag gatgggag tggtgtgtg atgttcttg ttg </p>	Homo sapiens
51	640	Beta-2 adrenoceptor	NM_000024	<p> MGLMALIVL LIVAGNLVI VAIAKTPRLQ TLTNLFMSL ASADLVMSL VVPGATIV WGRWEYGSFF CELWTSVDVL CVTASITLC VIALDRYLAI TSPFQYQSL TRARGLVLC TVWAI SALVS FLPILMHWR AESDEARRCY NDPKCCDFVT NRAYAIASSV VSFYVPLCIM AFVYLRVFE AQKQVKIDS CERRFLGGPA RPPSPSPSV PAPAPPSPPP RPAANAATAP LANGRAGRR PSRLVALREQ KALKTLGIIM GVFTLCWLPF FLANVVKAFH RELVPDRLEFV FFNWLGYSNS AFNPILYCRS PDFKAFQGL LCCARRARR RHATHGDRPR ASGCLARPGP PPSPGAASDD DDDVVGATP PARLLEPWAG CNGGAADSD SSLDEPCRP FASESKV actgcgaagc ggtctcttca ggcacgggc tggaaactggc aggcaccgc agccctagc A accgcacaag ctgagtgtgc aggcagagtc cccaccacac ccaccacaca gccgtgaat gaggtctcca ggcgtccgct cgcggcccg agagcccg cgtgggtccg ccgctgag cgccccagc cagtgcgctt acctgccaga ctcgcccga tggggcaacc cgggaacggc agcgcctct tgcggcacc caatagaagc catgcgcgc accacagct cagcagcaa agggacgag gtgtgggtgt ggcagtgcc atcgtcatgt ctctcatgt cctggccatc gtgtttggca atgtgtgtgt catcacagcc attgccaagt tcgagcgtct gcagcggtc accaactact tcatcactc actggcctgt gctgatctgg tcatggcct ggcagtggtg ccctttgggg ccgcccata tcttatgaa atgtggact ttggcaact ctggtgcgag ttttggactt ccattgatgt gctgtgcgtc acggccagca ttgagaccct gtgcgtgac </p>	Homo sapiens

52	640	Beta-2 adrenoceptor	NP_000015.1	<p>gcagtggatc gctactttgc cattacttca cttttcaagt accagagcct gctgaccaag aataaggccc ggtgatcat tctgatgtg tggattgtgt caggccttac ctcttcttg ccatttcaga tgcactggtg ccgggccacc caccaggaag ccatcaactg ctatgccaat gagacctgct gtgacttctt caccgaacca gctatgcca ttgctcttc catcgtgtcc ttctacgttc cctggtgat catggtcttc gtctactcca ggtctttca ggaggccaaa aggcagctcc agaagattga caaatctgag gccgcttcc atgtccagaa ccttagccag gtggagcagg atggcgagac ggggcatgga ctccgcagat ctccaagt ctgcttgaag gagcacaag cctcaagac gtaggcac atcatggga ctttaccct ctgctggctg cccttctca tcgttaacat tgtgcatgtg atccaggata acctatccg taaggaaatt tacatcctcc taaattggtat aggtatgtc aattctggt tcaatccct tatctactgc cggagcccag atttcaggat tgccttccag gagcttctgt gcctgcgag gtcttcttg aaggcctatg ggaatggcta ctccagcaac ggcaacacag gggagcagag tggatatcac gtggaacagg agaagaaaa taaactgctg tgtgaagacc tcccaggcac ggaagacttt gtgggccatc aagttactgt gcctagcgt aacattgatt caaaggag gaattgtagt acaaatgact cactgctgta aagcagttt tctacttta agaccccc ccccccaac agaacactaa acagactatt taacttgag gtaataaact tagaataaaa ttgtaaaaa tgtatagaga tatgcagaag gaaggcacc ctctgcctt tttattttt ttaagctgta aaaagagaga aaacttattt gactgattat ttgttatttg tacagttcag ttcctctttg catggaattt gtaagtattt gtctaaagag ctttagtccct agaggacctg agtctgctat atttcatga ctttccatg tatctacac actattccaa tattaggggt aatatattgc tgctggtaat ttgtatctga aggagatttt ccttccata ccttggact tgaggatttt gagtatctcg gacctttcag ctgtgaacat ggactcttcc cccactctc ttatttgctc acacgggga ttttaggcag gatttgag agcagcttca gttgtttcc cgagcaaaag tctaaagttt acagtaata aatgtttga ccatg</p>	Homo sapiens
53	643	Beta-3 adrenoceptor	NM_000025	<p>FERLQTVNY FITSLACADL VMGLAVPFG AAHILMKWT FGNFCEFWT SIDVLCVTAS IETLCVIAVD RYFAITSPFK YQSLITKKA RVIILMWIV SGLTSFLPIQ MHWYRATHQE AINCYANETC CDEFTNQAYA IASSIVFYV PLVIMVFYS RVFQEAQRQL QKIDKSEGRF HVQNLSQVEQ DGRTHGLRR SSKFCLKEHK ALKTLGIIMG TFTLCWLPIFF IWNIVHVIQD NLIRKEVYIL LNWIGYVNSG FNPLIYCRSP DFRIAFQELL CLRRSSILKAY GNGYSSNGNT GEQSGYHVEQ EKENKLLCED LPGTEDFVGH QGTVPDNDID SQGRNCSTND SLL</p>	Homo sapiens

54	643	Beta-3 adrenoceptor	NP_000016.1	MAPWPHENSS LAIPWDLPTL APNTANTSGL PGVPWEAALA GALLALAVLA TVGNLLVIV P	Homo sapiens
				AIATWPRLOT MTNVFVTSLA AADLVMGLLV VPPAATLALT GHWPLGATGC ELWTSVDVLC	
				VTASIELTCA LAVDRYLAVT NPLRYGALVT KRCARTAVVL VMVSAVSVF APIMSQWVRV	
				GADAEARQCH SNPRCAFAS NMPYVLLSS VSFYLPFLVM LFVYARFVV ATRLRLLRG	
				ELGRFPPEES PPAFSRSLAP APVGTCAPE GVFACGRRA RLPLREHRA LCTLGLIMGT	
				FTLCWLPPFL ANVLRALGGP SLVPGPAFLA LNWLGYNASA ENPLYCRSP DFRSAFRRLL	

gctacctggc tgtgaccaac ccgctgcgtt acggcgcaact ggtaccaag cgctgcgcc
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 ccttcgcgcg tcttctgtgc cgtgcgcg ctcgcctgc tccggagccc tgcgcgcg
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 ttac

55	688	Opsin, blue- sensitive	NM_001708	CRCGRRRLPPE PCAARRPALF PSQVPAARSS PAQPRLCQRL DGASWGVVS ggcatccatg agaaaatgt cggaggaaga gttttatctg ttcaaaata tctcttcagt A ggggccgtgg gatggcctc agtaccacat tggccctgtc tgggcttctt acctccaggc agctttcatg ggcactgtct tctttatagg tttccactc aatgccatgg tgcgtgtggc cacactgcgc tacaaaaagt tgcggcagcc cttcaactac attctggcca acgtgtcctt cggaggcttc ctctctgca tcttctctgt cttccctgtc ttctggcca gctgtaacgg atacttcgtc ttccgtcgcc atgtttgtgc tttggagggc tttctgggca ctgtagcagg tctggttaca gcatggtcac tggccttctt ggcctttgag cgtacattg tcatctgtaa ggccttcggc aacttcgct tcaagtccaa gcatgcactg acgtgtgtcc tggctacctg gaccattggg attggcgtct ccattccacc cttctttggc tggagccggg tcatccctga gggacctgag tgttctctg gacctgactg gtacacctg ggcacaaat accgcagcga gtcctatagc tggttctct tcatcttctg cttcattgtg cctctctccc tcatctgctt ctctacact cagctgtga gggccctgaa agctgttgca gctcagcagc aggagtcagc tacgacctag aaggtgaac gggaggtgag cgcgatgtg gttgtgatgg taggatcctt ctgtgtctgc tacgtgccct acggggcctt cgcgatgtac atggtaaca accgtaacca tgggctggac ttacggcttg tcaccattcc ttcattcttc tccaagagt cttgcatcta caatcccatc atctactgct tcatgaataa gcagttccaa gcttgcata tgaagatggg gtgtgggaag gccatgacag atgaatccga cacatgcagc tcccagaaa cagaagtctt tactgtctcg tctacccaag ttggcccca ctgaggacc aatattggcc tgttgcaac agtagaatt aaatttact t	Homo sapiens
56	688	Opsin, blue- sensitive	NP_001699.1	MRKMSSEEFY LFRNISSVGP WDGPQYHIAP VMAFYLOAAF MGTVELIGFP LNAMVLVATL P RYKKLRQPLN YILNVVSFGG FLICFVSFP VFVASCNGYF VFGRHVCALE GFLGTVAGLV TGWSLAFIAF ERYIVICKPF GNFRSSKHA LTVVLATWTI GIGVISIPFF GWSRFIPEGL QCSGPDWYIT VGTKYRSESY TWLFIFCFI VPLSLICFSY TQLLRALKAV AAQQQESATT QKAEREVSRM VVMVGSFCV CYVPAAFAM YMVNNRNHGL DLRLVTIPSF FSKSACIYNP IIYCFMKNQF QACIMKMWCG KAMTDESDTC SSQKTEVSTV SSTQVGP	Homo sapiens
57	692	Bombesin Receptor Subtype-3	NM_001727	gagtatctgg atgtcttggga tttctctccc attctgttct gttctgttct cctaatacca A tctcgttact agaggtaggc attggacgtg acaatcaact gcatttgaac tgagaagaag aaatattaaa gacacagtct tcagaagaaa tggctcaaa ggcacctcac tcacctaatc agactttaat ttcaatcaca aatgacacag aatcatcaag ctctgtggtt tctaacgata acacaaataa aggatggagc ggggacaact ctccaggaat agaagcattg tgtgccatct atattactta tgcgtgtgac atttcagtg gcatccttg aaatgctatt ctcatcaaa tctttttcaa gaccaaatcc atgcaaacag ttccaaatat ttcatcacc agcctggctt ttggagatct ttacttctg ctaacttctg tggcagtgga tgcactcac taccttgccag aaggatggct gttcggaaga attggttgta aggtgctctc ttcatccgg ctcaactctg ttgggtgtgc agtgttcaca ttaacaattc tcagcgtga cagatacaag gcagttgtga agccactga gcgacagccc tccaatgcca tctggaagac ttgtgtaaaa gctggctgag tctggatcgt gtcctatgata ttgtctctac ctgaggctat atttcaaat gtatacactt ttcgagatcc caataaaaa atgacatttg aatcatgtac ctcttacct gtctctaaga agctcttga agaaatacat tctctgctgt gcttcttagt gttctacatt attccactct ctattatctc tgtctactat tctctgattg ctaggaccct ttacaaaagc accctgaaca	Homo sapiens

58	692	Bombesin Receptor Subtype-3	NP_001718.1	<p> tacctactga ggaacaaaagc catgcccgtga agcagattga atcccgaag agaattgcca gaacgggtatt ggtgttggtg gctctgtttg cctctgtctg gtggccaaat caccctctgt acctctacca ttcattcaact tctcaaacct atgtagacc cctggccatg catttcattt tcaccatttt ctctcggtt ttggctttca gcaattcttg cgtaaacccc ttgtctctct actggctgag caaaagcttc cagaagcatt ttaaagctca gtgtttctgt tgcaaggcgg agcggcctga gcctcctgtt gctgacacct ctcttaccac cctggctgtg atgggaacgg tcccgggcac tgggagcata cagatgtctg aaattagtgt gacctcgttc actgggtgta gtgtgaagca ggcagaggac agattctagc ttttcaagga aaatgctgc ttctctctcc agcgtgtga tccgactcta agcgtgtgc agg </p>	Homo sapiens
59	729	CXC Chemokine Receptor 5	NM_001716	<p> GILGNAILIK VFFTKSMQT VPNI FITSLA FGDLLLLLTC VPVDATHYLA EGWLFGRIGC KVLSFIRLTS VGVSVFTLTI LSADRYKAVV KPLERQPSNA ILKTCVKAGC VWIVSMIFAL PEAIFSNVYT FRDPNKNMTF ESCTSYPPVSK KLLQEIHSLL CFLVFIPL SIISVYYSLI ARTLYKSTLN IPTEEQSHAR KQIESRKRIA RTVLVLVLF ALCWLPNHL YLYHSFTSQT YVDPSAMHFI FTIFSRVLAF SNSCVNPEAL YWLSKSFQKH FKAQLFCCKA ERPEPPVADT SLTTLAVMGT VPGTGSIQMS EISVTSFTGC SVKQAE DRF </p>	Homo sapiens
59	729	CXC Chemokine Receptor 5	NM_001716	<p> gctgccacct ctctagaggc acctggcggg gagcctctca acataagaca gtgaccagtc A tgggtactca cagcggcac agccatgaac taccgctaa cgttggaat ggacctcgag aacctggagg acctgttctg ggaactggac agattggaca actataacga caccctccctg gtggaaaatc atctctgccc tggcctacag gggccctca tggcctcctt caaggccgtg ttcgtgcccc tggcctacag ctctatctc ctctgggag tgatcggcaa cgtcctgggtg ctggtgatcc tggagcggca cggcagaca ctcagtcca cggagacctt cctgttccac ctggccgtgg cgaacctct gctggtctc atcttgcctt ttgcccgtggc cgaggcctct gtgggctggg tcttggggac ctctctctgc aaaactgtga ttgcccgtga caaagtcaac ttctactgca gcagcctgct cctggcctgc atgcgctgg accgtacct ggcattgtc cacgccgtcc atgcctaccg ccaccgcgc ctctctcca tccacatcac ctgtgggacc atctggctgg tgggcttctt ccttgccttg ccagagattc tcttgcgcaa agtcagccaa ggccatcaca acaactccct gccacgttg acccttctcc agagaacca agcagaaacg catgcctggt tcacctcccg attcctctac catgtggcg gattcctgct gccatgctg gtgatgggt ggtgctacgt gggggtagt cacaggttg gccaggccca gcggcgccct cagcggcaga aggcagtcag ggtggccatc ctggtgaca gcatcttctt cctctgctgg tcacctacc acatgctcat ctctctggac acctggcga ggctgaaggc cgtggacaat acctgcaagc tgaatggctc tctccccgtg gccatcaca tgtgtgagtt cctgggcccgtg gcccactgct gcctcaaccc catgctctac acttctgcg cgtgaaagt ccgcaagtgc ctgtcgccgc tcttgacgaa gctgggctgt accggccctg cctcctctg ccagctcttc cctagctggc gcaggagcag tctctctgag tcagagaatg ccacctctct caccacgttc taggtccag tgtcccttt tattgtgct tttccttgg gcaggcagtg atgtggatg ctccttccaa caggagctgg gatcctaagg gctcaccgtg gctaagagt tcctaggagt atcctcattt ggggtagcta gaggaaccaa ccccatctc tagaacatcc ctgccagctc ttctgccgc cctggggcta ggctggagcc caggagcgg aaagcagctc aaaggcacag tgaaggctgt ccttaccat ctgcacccc ctgggctgag agaactcac gcacctccca </p>	Homo sapiens

60	729	CXC Chemokine Receptor 5	NP_001707.1	<p> tctaatacat ccaatgctca agaacaact tctacttctg cccttgccaa cggagagcgc ctgccccctc cagaacacac tccatcagct taggggctgc tgacctccac agcttccccct ctctcctect gccacactgt caaacaagc cagaagctga gcaccagggg atgagtggag gttaaggctg aggaaggcc agctggcagc agagtgtggc cttcggacaa ctcagtcctc aaaaacacag acattctgcc aggcccccaa gcctgcagtc atcttgacca agcagggaagc tcagactggt tgaattcagg tagctgcccc tagctctgac cgaacacagc ctgggtccac cccatgtcac cggatcctgg gtggtctgca ggcagggctg actctaggtg cccttgaggg ccagccagtg acctgaggaa gcgtgaaggc cgagaagcaa gaaagaaacc cgacagaggg aagaaaagag ctttcttccc gaaccocaag gagggagatg gatcaatcaa accggcggtt ccctccgcc aggcgagatg gggtaggggtg gagaactcct aggttggtg ggtccagggg atgggaggtt gtgggcattg atggggaagg aggtggtt gtcctcctc cactccctc ccataagcta tagaccag gaaactcaga gtcggaaagg gtaaggtg ggaagtgtaa gcccgtggga gtcattctca ccatccctc cgtggcatca ccttaggcag ggaagtgtaa gaaacacact gaggcaggga agtccccagg cccaggaag cgtgccctg cccccgtgag gatgtcactc agatggaacc gcaggagct gctcgtgct tgtttgtca cctgggtgtg gggaggcccc tccggcagtt ctgggtgtc cctaccact cccagcctt tgatcaggtg gggagtcagg gaccctgccc cttgtccac tcaagccaa gacccaagct ccttgaggag ccccactggg gaaataacag ctgtggtctca cgtgagatg tcttcacggc aggacaacga ggaagcccta agacgtccct tttttctctg agtatctcct cgcaagctgg gtaatcgatg gggaggtctg aagcagatgc aaagaggcaa gaggtggat ttggaatttt ctttttaata aaaaggcacc tataaaacag gtcaatacag tacaggcagc acagagaccc ccggaacaag cctaaaaatt gttcaaat aaaaaccaag aagatgtctt caaaaaaa aaaaaaaa aaa </p>	Homo sapiens
61	735	C-C Chemokine Receptor 1	NM_001295	<p> ggcacgagcc cagaaacaaa gacttcacgg acaaaagtccc ttggaaccag agagaagccg A ggatggaaac tcaaacacc acagaggact atgacacgac cacagagttt gactatgggg atgcaactcc gtgccagaag gtgaacgaga gggcctttgg ggcacaaactg ctgccccctc tgtactcctt ggtattgtc attgccctgg ttggaacat cctgggtggtc ctggtccttg tgcaatacaa gaggtacaa aacatgacca gcatctacct cctgaacctg gccatttctg acctgctctt cctgttcacg cttcccttct ggtcgcacta caagtgaag gatgactggg tttttggtga tgccatgtgt aagatcctct ctgggtttta ttacacaggc ttgtacagcg agatcttttt catcatcctg ctgacgattg acaggtacct ggccatcgtc cagcccggtg ttgcccttgc ggcaggacc gtcacttttg gtgtcatcac cagcatcatc atttgggccc tggccatctt ggcttccatg ccaggcttat acttttcaa gacccaatgg gaattcactc accacacctg cagccttcac ttctcctcac aaagcctacg agagtgggaag ctgtttcagg </p>	Homo sapiens

62	735	C-C Chemokine Receptor 1	NP_001286.1	ctctgaaact gaacctctttt gggctgggtat tgccttttgtt ggtcatgac atctgtacac caggattat aaagattctg ctaagacgac caaatgagaa gaaatccaaa gctgtcgtt tgatttttgt catcatgac atcttttttc tcttttgac cccctacaat ttgactatac ttatttctgt ttccaagac ttctgttca cccatgagt tgagcagagc agacatttgg acctggctgt gcaagtgcg gaggatgcg cctacacgca ctgctgtgtc aaccagtg tctacgctt cgttggtgag aggttccgga agtacctgcg gcagttgttc cacaggctg tggtgtgca cctggttaaa tggctccctt tctctccgt ggacaggctg gaggggtca gctccacat tccctccaca ggggagcatg aactctctg cctgcccagg acactgagcc agcagcctg aggaggccaa cccaaaataa gcaggcgtga cctgcccagg acactgagcc agcagcctg ctctcccagc caggttctga ctctggcac agcatggagt cacagccact tggatagag agggaatga atggtggcct ggggcttctg aggttcttg ggcttcagtc tttccatga acttctccc tggtagaaag aagatgaatg agcaaaacca aatattccag agactgggac taagtgtacc agagaaggc ttggactcaa gcaagatttc agatttgtga ccattagcat ttgtcaacaa agtcacccac ttcccactat tgcctgcaca aaccaattaa acccagtagt ggtgactgt ggtccattc aaagtgcgt cctaagccat gggagacact gatgtatgag gaatttctgt tcttccatca cctccccccc cccgccacc gccaatcagt agccagcatc aaatagtgt ttccacagt actccactt ggtcctctg aatcctggg aacatagaac tgctccctt tcaactccac cgcaggattt gggctcttg aatcctggg aacatagaac tcatgacgga agagttaga cctaacgaga aatagaaatg ggggaactac tgcctggcagt ggaactaaga agcccttag gaagaatttt tatatccact aaatcaaac aattcaggga gtgggtaag cacggccat atgaataaca tgggtgtctt cttaaaatag ccataaagg gaggactca tcatctccat ttacccttct tttctgacta ttttcagaa tctctctct tttcaagttg ggtgatagt tggtagattc taatggctt attgcagcga ttaataacag gcaaaaggaa gcagggttg gttccgactg ccatcttgga cttgtcagca aaaaaaaa atgggtcaga gttccgactg ccatcttgga cttgtcagca aaaaaaaa 63	737	C-C Chemokine Receptor 3	NM_001837	ttttctctt tctatcacag ggagaagtga aatgacaacc tcatagata cagttgagac ctttggtacc acatcctact atgatgacgt gggcctgctc tgtgaaaaag ctgataccag agcactgat gccagtttg tggcccgct gtactccctg gtgttcactg tggcctctt gggcaatgt gtgggtgga tgatcctcat aaataacagg aggtccgaa ttatgaccaa catctacctg ctcaacctg ccatttcgga cctgctcttc ctcgtcacc ttccattctg gatccactat gtcagggggc ataactgggt ttttggccat ggcatgtga agctcctctc agggttttat cacacaggct tgtacagcga gatcttttc ataactcctg tgacaatcga caggtacctg gccattgtcc atgctgtgtt tgccttcga gccgggactg tcaactttg tgtcatcacc agcatcgtca cctggggcct ggcagtgtga gcagctcttc ctgaattat cttctatgag actgaagagt tgtttgaaga gactctttgc agtgccttt accagagga	Homo sapiens	Homo sapiens
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64	737	C-C Chemokine Receptor 3	NP_001828.1	<p> TTTSLDTVET FGTTSYYDDV GLLCEKADTR ALMAQFVPL YSLVFTVGLL GNVVVVMIIL P KYRRLRIMTN IYLLNLAISD LLFLVTLPFW IHYVRGHNWV FGHGMCKLLS GFYHTGLYSE IFFIILLTID RYLAIVHAVF ALRARIWTFG VITSIVTWGL AVLAALPEFI FYETEELFEE TLCSALYPED TVYSWRHEHT LRMTIFCLVL PLLVMAICYT GIITLLRCP SKKYYKAIRL IFVIMAVFFI FWTPYNVAIL LSSYQSILFG NDCERSKHLN LVMLVTEVIA YSHCCMNPVI YAFVGERFRK YLRHFFHRHL LMHLGRYIPF LPSEKLETS SVSPSTAEPE LSIVF cgggggtttt gatctttctt cctttcttct cctttcttct cttcccttct tctttcttct cctccctccc A tcttccattt cctttcttct tcttccctcag tctccacatt caacattgac aagtccattc agaaaaagcaa gctgcttctg gttgggcccc gacctgctt gaggagcctg tagagttaaa aaatgaaccc caccgatata gcagatacca cctctgcata agcatatata agcaattact atctgtatga aagtatcccc aagccttgca ccaagaagag catcaaggca tttggggagc tcttccctgccc cccactgtat tcttgggttt ttgtatttgg tctgcttggg aattctgtgg tggttctggt cctgttcaaa tacaagcggc tcagggtccat gactgatgtg taccgtctca accttgccat ctgggatctg ctcttctgtt tttccctccc tttttggggc tactatgcag cagaccagt ggtttttggg ctaggctctg gcaagatgat ttcctggatg tacttgggtg gctttttacag tggcatattc tttgtcatgc tcatgagcat tgatagatag ctggcgatag tgcacgcggt gttttccttg agggcaagga ccttgactta tggggtcatc accagtttgg ctacatggtc agtggctgtg ttgcctccc ttcctgggtt tctgttcagc acttgttata ctgagcgcaa ccatacctac tgcaaaacca agtactctct caactccacg acgtggaagg ttctcagctc cctggaaatc aacattctctg gattggtgat ccccttaggg atcatgctgt ttgtactc catgatcatc aggaaccttg agcattgtaa aaatgagaag aagaacaagg cggggaagat gatctttgccc gttgtgggtcc tcttccctgg gttctggaca ccttacaaca tagtgcctct cctagagacc ctggtggagc tagaagtcc tcaaggactgc acccttgaaa gatacttggg ctatgccatc caggccacag aaactctggc ttttggttcac tgcgtccctta atccccatcat ctactttttt ctggggggaga aatttcgcaa gtacatccta cagctcttca aaacctgcag gggccttttt gtgctctgccc aatactgtgg gctcctccaa atttactctg ctgacacccc cagctcatct tacacgcagt ccaccatgga tcatgatctt catgatgctc tgtaggaaaa atgaaatggt gaaatgcaga gtcaatgaac ttttccacat tcagagctta ctttaaaatt ggtattttta ggttaagagat cctgagcca gtgtcaggag gaaggcttac acccacagt gaaagacagc ttctcatcct gcaggcagct ttttctctcc cactagacaa </p>	Homo sapiens
65	738	C-C Chemokine Receptor 4	NM_005508	<p> cctctgtctc gttatggcca tctgtacac agaatcatc aaaacgctgc tgaagtcccc cagtaaaaaa aagtacaagg ccatcgggt catttttgtc atcatggcgg tgtttttcat tttctggaca cctacaatg tggctatcct tctctcttcc tatcaatcca tcttatttgg aaatgactgt gagcggagca agcatctgga cctgggtcatg ctgggtgacag aggtgatcgc ctactccac tgctgcatga acccgtgat ctacgcttt gttggagaga ggttccggaa gtacctgcgc cacttcttcc acaggcactt gctcatgcac ctgggcagat acatcccatt ccttcctagt gagaagctgg aaagaaccag ctctgtctct ccatccacag cagagccgga actctctatt gtgttttagg tcagatgcag aaattgcct aaagaggaag gaccaaggag atgaagcaaa cacattaagc cttccacact cacctctaaa acagtcttcc aaacttccag </p>	Homo sapiens

66	738	C-C	Chemokine Receptor 4	NP_005499.1	gtccagcctg gcaagggttc acctgggctg aggcattcctt cctcacacca ggcttgctg caggcatgag tcaagtctgat gagaactctg agcagtgcctt gaataagttt gtaggtaata ttgcaaggca aagactattc ccttctaacc tgaactgatg ggtttctcca gaggaattg cagagtactg gctgattgag taaatcgta ccttttgctg tggcaaatgg gcccccg MNPTDIADTT LDESIYSNY LYESIPKPT KEGIKAFGEL FLPLYSLVF VFGLLGNVV P VLVLFKYKRL RSMVDVLLN LAISDLLVF SLPFWGYAA DQWVFLGLC KMISWMLVG FYSGIFVML MSIDRYLAIV HAVFSRLART LTYGVITSLA TWSVAVFASL PGFLFSTCYT ERNHTYCKTK YSLNSTWKV LSSLEINILG LVIPLGIMLF CYSMIIRTLQ HCKNEKNKA VKMIFAVVVL FLGFWTPYNI VLFLETLVEL EVLQDCTFER YLDYAIQATE TIAFVHCCLN PIIYFFLGEK FRKYILQLFK TCRGLFVLCQ YGGLLIQISA DTPSSSYTQS TMDHDLHDAL gtgagacagg ggtagtcgca ggcggggcac agccttctctg tgtggtttta ccgcccagag A agcgtcatgg acctggggaa accaatgaaa agcgtgctgg tgggtgctct ccttgcatt ttccaggat gccgtgtgca agatgaggtc acggacgatt acatcgaga caacaccaca gtggactaca ctttgttga cttccatgta cttcttctg tccaagaagg acgtgaggaa ctttaaagcc tggttcctcc ctatcatgta cttccatcatt tgtttctggt gccactggg caatgggctg gtcgtgttga cctatatcta tttcaagagg ctcaagacca tgaccgatac ctacctgtc aacctggcgg tggcagacat cctcttctc ctgaccttc cttctgggc ctacagcgg gccaaagtcct ggttcttctg tgtccacttt tgcaagctca tctttgcat ctacaagatg agcttcttca gtggcatgct cctacttctt tgcatcagca ttgaccgcta cgtggccatc gtccaggctg tctcagctca ccgccacct agccacagt cttccatcag caagctgtcc tgtgtgggca tctggatact agccacagt gctctcctc cagagctctt gtacagtgc ctccagagga gcagcagtg gcaagcagt gctgctctc tcatcacaga gcagtggag gcctttatca ccaccaggt gccccagatg gtgctggtt tctgtgtccc cctgtggcc atgagcttct gttaccttct catcctcgc acctgctcc aggcacgcaa ctttgagcgc aacaaggcca tcaaggtgat catcgtgtg cctgctggt tcatagttt ccagctgccc tacaatgggg tggctctggc ccagacgtg gccacttca acatcacagg tagcacctgt gagctcagta agcaactcaa catcgccctac gacgtcacct acagcctggc ctgctcgc tgctgcgtca accttctt gtacgcctt atcggcgtca agttccgcaa cgatctctt aagctcttca aggacctggg ctgcctcagc caggagcag tccggcagt gtcttctgt cggcacatcc ggcgtctctc catgagtgt gaggccgaga ccaccaccac cttctccca taggcgactc tctgctctg actagagga cctctccag ggtccctggg gtgggtag ggagcagatg caatgactca ggacatcccc ccgcaaaaag ctgctcaggg aaaagcagct ctccccctc agtgcaagcc ctgctccaga agttagctt acccaatcc cagctacctc aaccaatgcc gaaaaagaca gggctgataa gctaaccaca gacagacaac actgggaaac agaggctatt gtccccataa ccaaaaactg aaagtgaag tccagaaact gtccccact gctggagtga aggggccaag gaggtgagt gcaaggggag tgggagtgcc ctgaagagtc ctctgaatga accttctg cttccacaga ctcaaatgct cagaccagct cttccgaaaa ccaggcctta tctccaagac cagagatagt ggggagactt cttggcttgg tgaggaag cggacatcag ctggtcaaac aaactctctg aacctctcc tccatctt tcttactgt cctccaagcc agcgggaatg gcagtgcca cgcggccta aaagcacact catccccca cttgccgcgt cgcctctcca ggtctctaac aggggagagt gtggtgttct ctgcaggcca	Homo sapiens
67	741	C-C	Chemokine Receptor 7	NM_001838	gtgagacagg ggtagtcgca ggcggggcac agccttctctg tgtggtttta ccgcccagag A agcgtcatgg acctggggaa accaatgaaa agcgtgctgg tgggtgctct ccttgcatt ttccaggat gccgtgtgca agatgaggtc acggacgatt acatcgaga caacaccaca gtggactaca ctttgttga cttccatgta cttcttctg tccaagaagg acgtgaggaa ctttaaagcc tggttcctcc ctatcatgta cttccatcatt tgtttctggt gccactggg caatgggctg gtcgtgttga cctatatcta tttcaagagg ctcaagacca tgaccgatac ctacctgtc aacctggcgg tggcagacat cctcttctc ctgaccttc cttctgggc ctacagcgg gccaaagtcct ggttcttctg tgtccacttt tgcaagctca tctttgcat ctacaagatg agcttcttca gtggcatgct cctacttctt tgcatcagca ttgaccgcta cgtggccatc gtccaggctg tctcagctca ccgccacct agccacagt cttccatcag caagctgtcc tgtgtgggca tctggatact agccacagt gctctcctc cagagctctt gtacagtgc ctccagagga gcagcagtg gcaagcagt gctgctctc tcatcacaga gcagtggag gcctttatca ccaccaggt gccccagatg gtgctggtt tctgtgtccc cctgtggcc atgagcttct gttaccttct catcctcgc acctgctcc aggcacgcaa ctttgagcgc aacaaggcca tcaaggtgat catcgtgtg cctgctggt tcatagttt ccagctgccc tacaatgggg tggctctggc ccagacgtg gccacttca acatcacagg tagcacctgt gagctcagta agcaactcaa catcgccctac gacgtcacct acagcctggc ctgctcgc tgctgcgtca accttctt gtacgcctt atcggcgtca agttccgcaa cgatctctt aagctcttca aggacctggg ctgcctcagc caggagcag tccggcagt gtcttctgt cggcacatcc ggcgtctctc catgagtgt gaggccgaga ccaccaccac cttctccca taggcgactc tctgctctg actagagga cctctccag ggtccctggg gtgggtag ggagcagatg caatgactca ggacatcccc ccgcaaaaag ctgctcaggg aaaagcagct ctccccctc agtgcaagcc ctgctccaga agttagctt acccaatcc cagctacctc aaccaatgcc gaaaaagaca gggctgataa gctaaccaca gacagacaac actgggaaac agaggctatt gtccccataa ccaaaaactg aaagtgaag tccagaaact gtccccact gctggagtga aggggccaag gaggtgagt gcaaggggag tgggagtgcc ctgaagagtc ctctgaatga accttctg cttccacaga ctcaaatgct cagaccagct cttccgaaaa ccaggcctta tctccaagac cagagatagt ggggagactt cttggcttgg tgaggaag cggacatcag ctggtcaaac aaactctctg aacctctcc tccatctt tcttactgt cctccaagcc agcgggaatg gcagtgcca cgcggccta aaagcacact catccccca cttgccgcgt cgcctctcca ggtctctaac aggggagagt gtggtgttct ctgcaggcca	Homo sapiens

68	741	C-C Chemokine Receptor 7	NP_001829.1	<p>ggcagctgc ctccgctga tcaaagccac actctgggt ccagagtgg gatgacatgc actcagctct tggctccact gggatgggag gagaggacaa gggaaatgtc agggcgggg aggtgacag tggccgcca aggccacgag ctgttctttt gttctttgtc acagggactg aaaacctctc ctcatgttct gctttcgatt cgttaagaga gcaacatttt acccacacac agataaagtt tcccttgag gaaacaacag ctttaaaag MDLGRPMKSV LVVALLVIFQ VCLCQDEVTD DYIGNTTVD YTLFESLCSK KDVRNFKAWF P LPIMYSIICF VGLLNGLVV LTYIYFKRLK TMTDFYLLNL AVADILFLIT LPFWAYSAAK SWVGVHFECK LIFAIYKMSF FSGMLLLLCI SIDRYVAIVQ AVSAHRHRAR VLLISKLSKV GIWILATVLS IPELLYSDLQ RSSEQAMRC SLITEHVEAF ITIQVAQMVI GFLVPLLLAMS FCYLVIIRTL LQARNFERNK AIKVIIVV VFIVFQLPYN GVLAQTVAN FNITSSTCEL SKQLNIAYDV TYSLACVRCC VNPFLYAFIG VKFRNDLFKL FKDLGLCSQE QLRQWSSCRH IRRSMSVEA ETTTTFSP</p>	Homo sapiens
69	742	C-C Chemokine Receptor 8	AI733823	<p>TTTTAAATTA AAAACTTTAT TGAATAGCA TGTAGCAGC AGTGAACAGG GCATGGCACA A GAAGGTTTC AAAACAAGT TAGCATGAAG GATGCCATAT GCTGTTGCCA ACAACTAGAA CACGGTGACT AAAGACACAG TTCTGAATGT CCAGCACAAC CTCTGGCCTG CAACATATGTT CAGTGATGAT GATAAACAG GTGGTGACTT GGAAGGAATC CCTATGTCAA GTGAGAAAAA AAATGATGT CTGACCTCCT TATATATGTA AAAATATATAC CTTACAGATC CGTCAGTAAG CTGGAAGAAG TGGATGTTGA AGTTTTTAAC ATCAGATGAT GGTCTCCAGT TGTTTCATCAA CCCATGGTGA AATAGTGA CCGTTCTGAA TCAAAGTGA TCCTAATAGT GAAGACATTA ACATTGCAGA AAAAGTGCCT ACAGATTATA TGGTGAATAT ACGTGATGGG CTTCTTGAAG GACTAGAGCA GTGTGTTTC AAACAGAAC AAGAAATCAC GTCAGTTTAT TGCCAATAT GCTGTTGCCA ACATTAGAA CACATGACT GGAGACACAG TTGTGCGTGC A CTGGCACAAC CTCCAGCTG TGCTATGTT CAGTGATGAT GATGAGCAAG GTGGTGACTT TGAAGGATTT TGTATATCAA GTGAAAAGAA ATGATATCTG ACCTCCTTAC ATATCTAAAA CATATACCTT CAAAATCCAT CAATAAGCTG AAAGAAATAG ATATCAAAGA ATATTTTAAC ATCATTAATG AGGCTCCAGT TATTCATTCA TTGACCAATG GTAATATAGC TGAATGATT CTGAATCAAG CTGATTATGA TAATAGTGAT GATGAAGATG ATGTTAATAC TGCAGAAAAA GTGCCTATAA ATGACACAGT GAAAA</p>	Homo sapiens
70	742	C-C Chemokine Receptor 8	IG6770	<p>ctccagagag gctgctgctc attgagctgc actcacatga ggatacacag tttgtgaaga A aggaattggc aacactgaaa cctccagaac aaaggctgtc actaaggctc cgctgccttg atggattata cacttgacct cagtgtaga acagtgaccg actactacta ccctgatatac ttctcaagcc cctgtgatgc ggaacttatt cagacaaatg gcaagttgct ccttgctgtc ttttattgcc tctgtttgt attcagttct ctgggaaaca gctgggtcat cctgggtcctt gtggtctgca agaagctgag gagcatcaca gatgtatacc tcttgaacct ggcctgtctt gacctgcttt ttgtctctc ctctcccttt cagacctact atctgctgga ccagtgggtg tttgggactg taatgtgcaa agtgggtgtc ggccttttatt acattggctt ctacagcagc atgtttttca tcacctcat gagtgtggac aggtacctgg ctgtgttcca tggcgtgtat gccctaaagg tgaggacgat caggatgggc acaacgctgt gctgggagat atggctaacc gccattatgg ctaccatccc attgctagt tttaccacaa tggcctctga agatgggtgtt ctacagtgtt attcatttta caatcaacag actttgaagt ggaagatctt caccacactc aaatgaaca ttttaggctt gttgatccca ttcacatctt ttatgttctg ctacattaaa</p>	Homo sapiens
71	742	C-C Chemokine Receptor 8	NM_005201		Homo sapiens

72	C-C Chemokine Receptor 8	NP_005192.1	<p>atcctgcacc agctgaagag gtgtcaaaac cacaacaaga ccaaggccat caggttggtg</p> <p>ctcattgtgg tcattgcac tttacttttc tgggtcccat tcaacgtggt tctttctc</p> <p>acttccttgc acagtatgca catcttggat ggatgtagca taagccaaca gctgacttat</p> <p>gccaccatg tcacagaaat catttcttt actcactgct gtgtgaaccc tgttatctat</p> <p>gcttttgttg gggagaagtt caagaaacac ctctcagaaa tatttcagaa aagttgcagc</p> <p>caaatcttca actacctagg aagacaaatg cctaggaga gctgtgaaaa gtcacatccc</p> <p>tgccagcagc actcctccc ttcctccagc gttagctaca ttttgtgagg atcaatgaag</p> <p>actaaatata aaaaacattt tcttgaatgg catgctagta gcaagtggca aaggtgtggg</p> <p>tgtgaaaggt ttccaaaaaa agttcagcat gaaggatgcc atatatgttg ttgccaaacac</p> <p>ttaaaacaca atgactggag acatagtgtt gcatgcctgg cacaacatca agcctgtgat</p> <p>tgtgtttatt gatgatgttg aacaagtgtt aactttaag gattctgtat gccaagtga</p> <p>aaaaaaagat gtctgacctc cttcatatgc aaaaatatac cttcagagac gtgcagtagg</p> <p>ctggaagaag tggatatgga agtttgaca tcaatgatga ggtccagtt gtctatgcat</p> <p>tgactgatgg tgaatggct ggagtgttc tgaatcaagg tgattgtgat tatagtga</p> <p>atgaagatga tgcattaat actgcataaa aagtgctgt agatgacatg gtgaaaaat</p> <p>ttgacaggct tatggaagga ctacagcagc acgattcat aacagaacaa gaaattatct</p> <p>cagcttataa aatcaaacag agacttctag acaaaaacca ttgttgatga ggcagatgcc</p> <p>tctagaagag acgtttaaaa gccatcaaac acaatgcctc atcttccctg gaggaccac</p> <p>ttcctgatcc ctcaactgtg tctgatgttt cttctcatgt aagaaataaa aaataaaaat</p> <p>aaaaaaatat atattggtat gtaactacag gaaaaataa aaaaatatat agtggacagt</p> <p>aacctttcaa tcaaaactca gtatcataag tagagactga aaacttgccg ttattgattg</p> <p>ttgttattaa cagctgatac aggtattctg ctgatgctac tgctgcctag ttaccatgaa</p> <p>caggtttttt cactattaat ggtgcgtcat attttttact tttaagtact tacgtgtgag</p> <p>taagtgtaaag aaaaatgattg cttatcagta gtatcaatga ttactcaat atctgaatca</p> <p>ccttgattca gaaccatttc agctgtttca ccatcagatga atgaataaca gctcattga</p> <p>tgtcaaaaac ttcaatatcc acttcttca gcctactgta gactctggaa gtatactttt</p> <p>tgcatatgta aggaagtcag atttttttt</p>	Homo sapiens
73	CXC Chemokine Receptor 3	NM_001504	<p>MDYTLDSVT TVTDYYYPDI FSPCDAELI QTNKLLLV FYCLLFVFSL LGNSLVILVL P</p> <p>VCKKLRISIT DVYLLNLALS DLLFVSFPF QTYLLDQWV FGTVMCKWVS GFYIIGFYSS</p> <p>MFITILMSVD RYLAHVAVY ALKVRTIRMG TTLCLAVWLT AIMATIPLLV FYQVASEDGV</p> <p>LQCYSFYNQO TLKWKIFTNF KMNILGLLIP FTIFMFCYIK ILHLKRCQN HNKTALRLV</p> <p>LIVVIASLLF WVPFNVLFL TSLHSMHILD GCSISQQLTY ATHVTEIISF THCCVNPVIY</p> <p>AFVGEKFKKH ISEIFQKSCS QIFNYLGRQM PRECEKSSS CQHSRSSSS VDYL</p> <p>ccaaccacaa gcaccaagc agaggggcag gcagcacacc acccagcagc cagagacaca A</p> <p>gccagcccat ggtccttgag gtgagtgacc accaagtgtt aaatgacgcc gaggtgccc</p> <p>ccctcctgga gaacttcagc tcttctctatg actatggaga aaacgagagt gactcgtgct</p> <p>gtacctccc gccctgcca caggacttca gctgaaactt cgaccgggccc ttcctgcccag</p> <p>ccctctacag cctcctcttt ctgctggggc tgcctgggcaa cggcgcggtg gcagccgtgc</p> <p>tgctgagccg gcggacagcc ctgagcagca ccgacacctt cctgctccac ctactgttag</p> <p>cagacacgct gctggtgctg acactgccgc tctgggcagt ggacgctgcc gtccagtggg</p> <p>tctttggctc tggcctctgc aaagtggcag gtgcctctt caacatcaac ttctacgacg</p>	Homo sapiens

74	752	CXC Chemokine Receptor 3	NP_001495.1	<p>gagccctct gctggcctgc atcagctttg accgctacct gaacatagtt catgccaccc agctctaccg cggggggccc cggcccgcg tgacctcac ctgcctggct gtctgggggc tctgctgct ttgcgcttc ccagacttca tcttctgtc gggccaccac gacgagcgcc tcaacgccac ccaactgcaa tacaacttcc cacaggtggg ccgacaggtc ctgcggtgctg tgacagtggg ggtggctttt ctgctgcccc tgctggtcat ggctactgct tatgcccaca tctggccgt gctgctggtt tccaggggcc agcgcgccct gggggccatg cggctgggtg tgggtgctgt ggtggccttt gcctctgct ggaccccta tcacctggtg gtgctgggtg acatcctcat ggactgggc gcttggccc gcaactgtgg ccgagaaagc aggtagagc tggccaagtc ggtcacctca ggcctgggct acatgcatg ctgctcaac ccgctgctct atgctttgt aggggtcaag ttccgggagc ggatgtggat gctgctcttg cgcctgggct gcccacaaca gagaggctc cagaggcagc catcgtcttc cgcggggat tcactctggt ctgagacctc agaggcctcc tactgggct tgtgaggcgg gaatccgggc tccctttcg ccacagctct gacttccccg cattccaggc tcttccctcc ctctggcggc tctgctctc cccaatatcc tcgctccccg gactcactgg cagccccagc accaccaggt ctcccgggaa gccacctcc cagctctgag gactgcacca ttgctgctcc ttgctgcca agccccatcc tgccgccccg ggtggctgcc tggagccccca ctgcccttct catttgaaa ctaaaacttc atcttcccc agtgcgggga gtacaaggca tggcgtagag ggtgctgccc catgaagcca cagcccgagc ctccagctca gcagtactg tggccatggt ccccaagacc tctatatgtg ctcttttatt tttatgtcta aaatcctgct taaaacttt caataaaca gatcgtcagg accaaaaa aaaaaaaa aaaaaaaa aaaaaaaa aaaaaaaa</p>	Homo sapiens
75	753	CXC Chemokine Receptor 4	NM_003467	<p>gtttgttggc tgcggcagca ggtagcaaa gtagccgag ggctgagtg ctccagtagc A caccgcatct ggagaaccag cggttaccat ggaggggac agtatataca ctccagataa ctacaccgag gaaatgggct caggggacta tgactccatg aaggaaccct gtttccgtga agaaaatgct aatttcaata aaatcttct gccaccatc tactccatca tcttctaac tggcattgtg ggcaatggat tggctactct ggtcatgggt taccagaaga aactgagaag catgacggac agtacaggc tgcacctgtc agtggccgac ctctcttttg tcatcagct tcccttcttg gcagttgatg ccgtggcaaa ctggtacttt gggaacttcc tatgcaaggc agtccatgtc atctacacag tcaacctcta cagcagtgct ctcatcctgg ccttcatcag tctggaccgc tacctggcca tcgtccacgc caccacagt cagaggccaa ggaagctgtt ggctgaaaag gtggtctatg ttggcgctctg gatccctgcc ctctgctga ctattccga cttcatcttt gccaacgtca gtgaggcaga tgacagatat atctgtgacc gtttctacc caatgacttg tgggtggttg tgttccagtt tcagcacatc atggttggcc ttatcctgcc tgggtattgt atctgtctct gctattgcat tatcatctcc aagctgtcac actccaaagg ccaccagaag cgaaggccc tcaagaccac agtcatctc atctggctt tcttcgctg</p>	Homo sapiens

76	753	CXC Chemokine Receptor 4	NP_003458.1	<p>ttggctgctt tactacattg ggcacagcat cgactccttc atcctcctgg aatcatcaa gcaagggtgt gagtttgaga acactgtgca caagtggatt tccatcacgg aggccttagc ttcttccac tgtgtctga accccatcct ctatgcttcc ctggagcca aatttaaac ctctgccag cagcactca cctctgtgag cagagggctc agcctcaaga tcctctccaa aggaagcga ggtggacatt catctgttcc cactgagctc gagcttcaa gtttccactc cagctaacc agatgtaaaa gacttttttt tatacgataa ataacttttt tttaagttac acatttttca gatataaaag actgaccaat attgtacagt ttttattgct tgttggattt ttgtcttggt ttcttttagt ttttgtgaag tttaattgac ttatttatat aaattttttt tgtttcatat tgatgtgtgt ctaggcagga cctgtggcca agttcttagt tgctgtatgt ctctggtag gactgtagaa aagggaaactg aacattccag agcgtgtagt gaatcacgta aagctagaaa tgatcccccag ctgtttatgc atagataatc tctccattcc cgtggaacgt tttctctgtt ctttaagacgt gattttgtctg tagaagatgg cacttataac caaagcccaa agtggtagag aaatgctggt ttttcagttt tcaggagtggt gttgatttca gcacctacag tgtacagctc tgtattaagt tgttaataaa agtacaatgtt aaacttactt agtgttatg tgmgyqkklr smtdkyrlhl svadllfvit lpfwvavda nwyfgnflck avhviytnvl yssvllilafi sldrylaivh atnsqrprkl laekwvyvgv wipallltip dfifanvsea ddryicdrfy pndlwvvvfq fqhimvglil pgivilscyc iisiklshsk ghqkrkalkt tvililaffa cwlpypyigis idsfilleii kqcefeentv hkwisiteal affhccclnpi lyafllgakek tsaqhaltsv srgsslkils kgkrgghssv stesesssfh ss</p>	Homo sapiens
77	755	Complement Component 3a Receptor 1	NM_004054	<p>atggcgctct tctctgctga gaccaattca actgacctac tctcacagcc atggaatgag A ccccagtaa ttctctccat ggtcattctc agccttactt ttttactggg attgccaggc aatgggctgg tgcgtgtgggt ggctggcctg aagatgcagc ggacagtga cacaatttgg ttctccacc tcaacttggc ggacctctc tgctgctctc ccttgccctt ctgctggct cacttggctc tccagggaca gtggccctac ggcaggttcc tatgcaagct catccctcc atcattgtcc tcaacatgtt tgccagtgtc ttctgtcta ctgccattag cctggatcgc tgtcttgtgg tatcaagcc aatctgggtg cagaatcctc gcaatgtagg gatggcctgc tctatctgtg gatgtatctg ggtgggtggct ttgtgtagt gcatctctgt gttcgtgtac cgggaaatct tcactacaga caaccataat agatgtggct acaaatbtgg tctctccagc tcattagatt atccagactt ttatggagat ccactagaaa acaggtctct tgaataacatt gttcagccgc ctggagaaat gaatgatagg ttatgacctt cctctttcca acaaatgat catccttga cagtcaccac tgtcttccaa cctcaaacat ttcaagacc ttctgcagat tcactcccta ggggttctgc taggttaaca agtcaaaaatc tgtattctaa tgtatttaa cctgtgatg tggctcacc taaaatcccc agtgggttcc ctattgaaga tcacgaaacc agccactgg ataactctga tgccttttctc tctacttact taaagctgtt ccttagcgt tctagcaatt ccttctacga gtctgagcta ccacaaggtt tccaggatta ttacaattta ggccaattca cagatgacga tcaagtcca acaccctcg tggcaataac gatcactagg ctagtgggtg gtttctctgt gccctctgtt atcatgatag cctgttacag cttcattgtc ttccgaatgc aaaggggccc cttcgcccaag tctcagagca aaaccttctg agtggccgtg gtgggtgtgg ctgtcttctt tgtctgtctg actccatacc acatttttgg agtccctgtc ttgcttactg acccagaaac tcccttgggg aaaactctga tgcctctggga tcatgtatgc</p>	Homo sapiens

78	755	Complement Component 3a Receptor 1	NP_004045.1	MASFSAETNS FLHLTLADLL CLVFEKPIWC SLDYPDFYGD SLPRGSARLT SSNSFYESEL FRMQRGREAK IALASANSCE TV	TDLISQPWNE CCLSLPFSLA QHNRNVGMAC PLENRSLENI SQNLYSNVFK PQGFQDYNL SQSKTERVAV NPFLYALLGK	PPVILSMVIL HLALQGWFPY SICGCIWVVA VQPPGEMNDR PADVWSPKIP GQFTDDQVP VVAVFLVCW DFRKKARQSI	SLTFLLGLPG GRFLCKLIPS FMCIPVFVY LDPSSFQTNL SGFPIEDHET TPLVAITITR TPYHIFGVLS QGILEAAFSE	NGLVLWVAGL IIVLNMFASV REIFTDNHN HPWTVPVTFQ SPLDNSDAFL LVVGFLLPSV LLTDPETPLG ELTRSTHCPS	KMQRTVNTIW P FLHTAISLDR RCGYKFGLS	Homo sapiens
79	758	Complement Component 5a Receptor 1	NM_001736	agggggagcc cactatgatg ctgcgtgttc ctgggcaatg atctgggtcc ttcacgtcca ccctccctca gaccgctttc gcctggatcg ctgtaccggg agccacgaca tggcctctac agggccacgc atcttctggt ccacacttcc tgctgcatca aaatccctcc aagtcattca acagcctcat ttttcacttc cctgtctttc tgcaagggtga catctttcca atatggcaat aaaaaaatgt tttgggacaa aaagaaaaat aggtgggtgg	caggagacca acaagatac cagacatcct ccctgggtgt tcaactggc ttgtacagca tctgtctcaa tctgtgtgtt tgctgtgctg cctgtgccgt tgggtccggga aacggcggga tcacgctcac ggtccaccaa tgccctacca accocatcat ccagcctcct cgggacactg ggccactcat acttttctgt ccagacttgt acacttctct tcccaggctt aggtgtgaac atttatttta aacagaagtc aggctgagag atcacctgag	gaacatgaac cctggacctc ggccttggtc ctgggtgacg ggtagccgac tcaccactgg catgtacgcc taaaccatc ggcttgggtt gggtccggga ggagtacttt gcgagccgtg gatttgttac gacactcaag ggtgacgggg taagctggac ctacgtgtgt ccggaacgtg agtggacact ggcccgatgt ggatgggtgt ccctcctttt ctaggggagca ttgaaaaaca agggaaactca tggcaagtgt catggagtta cagtggtctca gtcaagaggtt	tccttcaatt aacacccctg atctttgcag gcattcgagg ttcctctcct agcattctgc agcattctgc tgggtgccaga ttagccctgc ccaccaaagg gccatcgctc actttctac tgctccggac cagtggtggc ccttccctga tctcctttgc gcttccaggg tgactgaag atggcccaga ccccttctct accttagcta ccagcgggac ccctccacc aacagaaacc gaatacacag gaaaatatgt tgaagttag cgcctgtaac ccagaccagg	tgattatggg A ttctaacaac ggtgggagtg catcaatgcc gcccactgtg ggcgcgcctg tctgggccac agtcgcaggg ggtgtgtctc tgctccggac cagtggtggc ccttccctga tctcctttgc gcttccaggg agtcctgtgt agaccaggc ctccctcttg ctcaactctc tcttctcact ccccacccc cgtgtatctg aagtagaaag aactggaatc tgaagttag ccagaaactt ctggccaggca	Homo sapiens	

80 Complement NP_001727.1
Component 5a
Receptor 1

Homo
sapiens

ccgtctgtac taaaaataca aaaaattaac tgggcatggt agtgggtgccc tgtaatccca
gctacttggg aggtgaggt gggagaattg ctgaaacctt ggaggtggag gttgtgtga
gccatgatcg caccactgca ctctagcctg ggtgaccgag ggaggtctctg tctcaaaagc
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aaccctggc aaccaggaaat ccactctcca tttctataat gttgtcattt caagaatgtt
attcaatgga atcatatagt atgtaacctg ttttgagctt aaaaaaaaaa gtatacatga
ctttaatgag gaaaaataaaa atgaatattg aaaaaaaaaa ctttagag

ctttaatgag gaaaaataaaa atgaatattg aaaaaaaaaa ctttagag
VTAFKAKRTI NAIWFLNLAV ADFLSCLALP ILFTSIVQHH HWPFGAACS ILPSLILNM
YASILLATI SADRFLLVFK PIWQNFRA GLAWIACAVA WGLALLTIP SFLYRVVREE
YFPPKVLGV DYSHDKRRER AVAIVRLVIG FLWPLLTITI CYTFILLRTW SRRATRSTKT
LKVVAVVAS FFIWLPYQV TGIMSFLEP SSPTFLLLNK LDSLCVSFAY INCCINPIIY
WVAGQGFQGR LRKSLPSLLR NVLTEESVVR ESKSFTRSTV DTNAQKTQAV

81 Calcitonin NM_005795
Receptor-
like
Receptor

Homo
sapiens

gcacgaggga acaacctctc tctctscagc agagagtgtc acctctgct ttaggacct A
caagctctgc taactgaatc tcactcctaact tgcaggatca cattgcaaaag ctttcactct
ttccacactt gcttgtgggt aaatctcttc tgcggaatct cagaaagtaa agttccatcc
tgagaatatt tcacaaagaa tttccttaag agctggactg ggtcttgacc cctggaattt
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agactgcact aaatttgttt tactgacca taattggaca cggattgtct attgcatcac
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tacacaaaa tctgttcttc tcatttgtt gtaactctgt tgaacaatc attcacctca
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agttcattca tctttacctg atgggctgta attacttttg gatctctgt gaaggcattt
acctacacac actcattgtg gtggcctgt ttgcagagaa gcaacattta atgtgggtatt
atttcttgg ctgggggattt ccactgattc ctgcttgat acatgccatt gtagaagct
tatattacaa tgacaattgc tggatcagtt ctgataccca tctctctac attatccatg

Accession	Gene	Protein	Species
82	Calcitonin Receptor-like Receptor	NP_005786.1	Homo sapiens
767	Calcitonin Receptor-like Receptor	NP_005786.1	Homo sapiens
83	Cannabinoid Receptor 1	NM_001840	Homo sapiens
832	Cannabinoid Receptor 1	NM_001840	Homo sapiens

84	832	Cannabinoid Receptor 1	NP_001831.1	<p> ccccagagac caggtgaaca ttacagaatt ttacaacaag tctctctcgt ccttcaagga gaatgaggag aacatccagt gtggggagaa cttcatggag atagagtgtt tcatggtcct gaacccagc cagcagctgg ccattgcagt cctgtccctc acgtcgggca ccttcaagggt cctggagaac ctcctgggtgc tgtgcgtcat cctccactcc cgcagccctcc gctgcaggcc ttcttaccac ttcatcgga gctgggggtt ggcagacctc ctggggagtg tcatTTTTgtt ctacagcttc attgacttcc acgtgttcca ccgcaaaagt agccgcaacg tgtttctgtt caaaactgggt ggggtcacgg cctccttcac tgcctccgtg ggcagccctgt tctcacagc catcgacagg tacatatcca ttacacaggc cctggccctat aagaggattg tcaccaggcc caaggccgtg gtggcgTTTT gctgatgtg gaccatagcc attgtgatcg ccgtgctgcc tctcctgggc tggaaactgcg agaaactgca atctgtttgc tcagacattt tcccacacat tgatgaaacc tacctgatgt tctggatcgg ggtcacaccg gtactgcttc tgttcatcgt gtatgcgtac atgtatatcc tctggaaggc tcacagccac gccgtccgca tgattcacg tggcacccag aagagcatca tcatccacac gtctgaggat ggaagggtac aggtgaccgc gccagaccaa gcccgcatgg acattaggtt agccaagacc ctggtcctga tcttgggtggt gttgatcatc tgcctggggcc cctcgtctgc aatcatggtg tatgatgtct ttgggaagat gaacaagctc attaagacgg tgtttgcatt ctgcagtatg cctcgcctgc tgaactccac cgtgaacccc atcatctatg cctcgaggag taaggacctg cgacacgctt tccggagcat gttccctct tgtgaaggca ctgcgcagcc tctggataac agcatggggg actcggactg cctgcacaaa cagcaaaa atgcagccag tgttcacagg gccgcagaaa gctgcatcaa gagcacggtc aagattgcca aggtaacctt gtctgtgtcc acagacacgt ctgccgaggc tctgtgagcc tgatgcctcc ctggcagcac aggaaaagaa ttttttttt taagctcaa atctagaaga gtcattgttc tcttgggtta tatttttta actttaccat gctcaaatgaa aaggtgattg ccacatgtca cttatttctt tagtttccgt ttgggctaat ctcccggggt tcgtaggaaa ccttt </p>	Homo sapiens
85	833	Cannabinoid Receptor 2	NM_001841	<p> KMTAGDNPQL VPADQVNITE FYNKLSSEK ENEENIQCE NEMDIECFMV LNPSQQLAIA VLSLTGLTFT VLENLLVLCV ILHSRSLRCR PSYHFIGSLA VADLLGSVIF VYSFIDFHFV HRKDSRNVEL FKLGVTASF TASVGSLELT AIDRYISIRH PLAYKRIVTR PKAVVAFCLM WTIAIVIAVL PLIGWNCEKL QSVCSDFPH IDETYLMEWI GVTSVLLLFV VYAYMYILWK AHSHAVRMIQ RGTQKSIH TSEDGKVQVT RPDQARMDIR LAKTLVLILV VLIICWGPLL AIMVYDVEGK MNKLIKTVFA FCSMLCLINS TVNPIIYALR SKDLRHAFRS MFPSCEGTAQ PLDNSMGDSD CLHKHANNA SVHRAAESCI KSTVKIAKVT MSVSTDTSAE AL caggtcctgg gagaggacag aaacaaactg gactcctcag cccccggcag ctccccagtgc A ccagccaccc acaacacaa ccaaaagcctt ctagacaagc tcatgtggaat ctgaagggcc caccctatgg aggaatgctg ggtgacagag atagccaatg gctccaagga tggcttggat tccaacccta tgaaggatta catgatcctg agtgggtccc agaagacagc tgttgcgtg ttgtgcactc ttctgggctt gctaaagtgc ctggagaacg tggctgtgct ctatctgac ctgtcctccc accaaactcc cgggaagccc tcatcctgt tcatgggcag ctgggctggg gctgacttcc tggccagtgt ggtctttgca tgcagctttg tgaatttcca tgttttccat ggtgtggatt ccaaggctgt cttcctgctg aagattggca gcgtgactat gaccttcaca gcctctgtgg gtacgtcct cctgaccgcc attgaccgat acctctgct gcgctatcca </p>	Homo sapiens

86	Cannabinoid Receptor 2	NP_001832.1	MEECWVTEIA NGSKDGLDSN PMKDYMILSG PQKTAVAVLC TLLGLLSALE NVAVLYLILS P	Homo sapiens
87	Leukocyte Antigen CD97	NM_001784	SHQLRRKPSY LFISGLAGAD FLASVVFACS FVNHFVHGV DSKAVFLKI GSVTMTFTAS VGSLLLTALD RYLCRLRPPS YKALLTRGRA LVTLGIMWVL SALVSYLPLM GWTCCPRPCS ELFLIPNDY LLSWLLFLAF LFSGIITYTG HVLWKAHQHV ASLSGHQDRQ VPGMARMLRD VRLAKTLGLV LAVLLICWEP VLALMAHSLA TTLSDQVKKK AFCSMLCLI NSMNPVIYA LRSGEIRSSA HHCLAHWKKC VRGLGSEAKE EAPRSSVTET EADGKITPWP DSRDLDSLDC agcctgtgga gacgggacag cctgtgtcca ctcactcttt cccctgccgc tctgcccgc A agctccaacc atgggaggcc gcgtctttct cgcattctgt gtctggctga ctctgccggg ctctgtgtgt agctgaaacc caggactcca ggggctgtgc ccggtgggtgc cctcagaact cctcgtgtgt caatgccacc cctgtcgtct gcaatccagg gttcagctct tttctgaga tcatcaccac cccgacggag actgtgacg acatcaacga gtgtgcaaca cctgcgaaa gtgtcatgcgg aaaaattctcg gactgtgga acacagaggg gagctacgac tgcgtgtgca gcccgggata tgagcctgtt tctggggcaa aaacattcaa gaatgagagc gagaacacct gtcaagatgt ggacgagtgc agctccgggc agcatcagt tgacagctcc accgtctgct tcaacaccgt ggggtcatac agctccgct gccgcccagg ctggaagccc agacacggaa tcccgaataa ccaaaaggac actgtctgtg aagatatgac tttctccacc tggaccgcc cccctggagt ccacagccag acgctttccc gattcttga caaagtccag gacctggga gagactccaa gacaagctca gccgaggtca ccatccagaa tgtcatcaaa ttggtggatg aactgatgga agctcctgga gacgtagagg ccctggcgcc acctgtccgg cactcatag ccaccagct gctctcaac ctggaagata tcatgaggat cctggccaag agctgccta aagccccct	Homo sapiens

88	922	Leukocyte Antigen CD97	NP_001775.1	<p>cactacatt tcccttcga acacagagct gacccctgat atccaggagc ggggggacaa gaacgtcact atgggtcaga gcagcgacg catgaagctg aattgggctg tggcagctgg agccgaggat ccaggccccc ccgtggcggg catcctctcc atccagaaca tgacgacatt gctggccaat gctccttga acctgcattc caagaagcaa gccgaactgg aggagatata tgaagcagc atccgtggtg tccaaactcag acgcctctct gccgtcaact ccattcttct gagccacaac aacaccaagg aactcaactc ccccatcctt ttcgcttctt cccacctga gtcctccgat ggggagggcg gaagagaccc tcctggccaa gacgtgatgc ctgggccacg gcaggagctg ctctgtgcct tctggaagag tgacagcgac aggggagggc actgggccac cgaggtctgc caggtgctgg gcagcaagaa cggcagcacc acctgccaat gcagccacct gagcagcttt acgatacctta tggctcatta tggctcatta gactggaagc tgacctgat caccagggtg ggaactggcg tgtaactctt ctgcctgctg ctgtgcatcc tcactttctt gctggtgcgg cccatccagg gctcgcgcac caccatacac ctgcacctct gcactgcct cttctgtggc tccaccatct tcctggcggg catcgagaac gaaggcggcc aggtggggct gcgtgcgc ctggtggcgg gctgctgca ctactgtttc ctggcgcct tctgctggat gagcctcgaa ggctggagc tctactttct tgtgtgcgc gtgttccaa gcccaggcct gagtaacgcg tggctctgcc tgatcggcta tggcgtgcc ctgctcatcg tggcgctctc ggctgccatc tacagcaagg gctacggcg cccagatac tgcgtgttg actttgagca gggcttcctc tggagcttct tgggacctgt gacctcatc attttgtgca atgctgtcat ttctgtgact accgtctgga agctcactca gaagtcttct gaaatcaatc cagacatgaa gaaattaaag aaggcgagg cgctgacct caggccatc gcgcagctct tctgtttggg ctgcacctgg gtctttggcc tgttcatctt cgacgatcg agcttggtgc tgacctatgt gtttaccatc ctcaactgcc tgcagggcgc ctctctctac ctgctgcact gcctgctcaa caagaagggt cgggaagaat accggaagt ggcctgccta gtgtctgggg ggagcaagta ctcagaattc acctccacca cgtctggcac tggccacac cagacccggg cctcagggc atcagagtcc ggcataatgaa ggcgcattgt tctggacggc ccagcagctc ctgtggccac agcagctttg tacacgaaga ccatccatcc tcccttcgtc caccactcta ctccctccac cctccctccc tgatcccgtg tgccaccagg agggagtggc agctatagtc tggcaccaaa gtccaggaca cccagtgggg tggagtggga gccactggc ctgctgctgg ctgcctctct gtccacctt gtgacccagg gtggggacag gggctggccc agggctgcaa tgcagcatgt tgccctggca cctgtggcca gtactcgga cagactaagg gcgcttgctc catcctggac ttttcctctc atgtctttgc tgcagaactg aagagactag gcgtggggc tcagcttccc tcttaagcta agactgatgt cagaggcccc atggcaggc ccttggggc cactgcctga ggctcacggt acagaggcct gccctgcctg gccgggcagg aggttctcac tgttgtgaa gtgtgagacg ttgtgtaatg tgtttttatc tgttaaaatt tttcagtgtt gacacttaaa attaaacaca tgcatacaga aaaaaaaaaa aaaaaaaaaa a</p>	Homo sapiens
			<p>MGGRVFLAFC VWLTLPGAET QDSRGCARWC PQNSSCVNAT ACRCNPGFSS FSEIITPTE P TCDDINECAT PSKVSCGKFS DCWNTEGSYD CVCSPGYEPV SGAKTFKNES ENTQDQVDEC SSGQHQCDSS TVCFNTVGSY SCRCRPGWKPR RHGIPNNQKD TVCEDMTFST WTPPPGVHSQ TLSRFFDKVQ DLGRDSKTSS AEVTIQNVIK LVDELMEAPG DVEALAPPVR HLIATQLLSN LEDIMRILAK SLPKGPFTYI SPSNTELTLM IQERGDKNVT MGQSSARMKL NWAVAAGAE PGPAVAGILS IQNMTTLLAN ASLNLSKKQ AELEEIYESS IRGVQLRRLS AVNSIFLSHN</p>		

89	941	EMR1 Hormone NM_001974 Receptor	NTKELNSPIL FAFSHLESSD GEAGRDPPAK DVMPGPRQEL LCAFWKSDSD RGGHWATEVC QVLGSKNGST TCQCSHLSSF TILMAHYDVE DWKLTILTRV GLALSLFCLL LCILTFLLVR PIQGSRTTIH LHLICLFLVG STIFLAGIEN EGGQVGLRCR LVAGLLHYCF LA AFCWMSLE GLELYFLVVR VFQOGLSTR WLCLIGYGVV LLIIVGSAAI YSKYGRPRY CWLDFEQGFL WSFLGPVTFI ILCNAVIFVT TVWKLTQKFS EINPDMKKLK KARALITAI AOLFLGLCTW VFGLFIFDDR SLVLTIVFTI LNCLOQAFLY LHCLLNKKV REEYRWACL VAGGSKYSEF TSTTSGTGHN QTRALPASES GI	Homo sapiens
			ctaaagtttt tttctttgaa tgacagaact acagcataat gcgtggcttc aacctgctcc tcttctgggg atgttgtgtt atgcacagct gggaaggcca cataagaccc acacggaaac caaacacaaa gggtaataac tgtagagaca gtaccttgtg ccagcttat gccacctgca ccaatacggg ggacagttac tattgcactt gcaaacagg cttcctgtcc agcaatgggc aaaatcactt caaggatcca ggagtgcgat gcaagatat agggaggtac aagtgcagct ccagccctg tggctctaac tcactctgca aaacctgtc ccagggaaag cggggcaatt gttagatgg tttctcttct cccactggaa atgactgggt ccagggaaag cggggcaatt tctcctgtac tgatatcaat gagtgcctca ccagcagggt ctgcctgtg cattctgact gtgtcaactc catgggaagc tacagttgca gctgtcaagt tggattcatc tctagaaact ccactgtga agcgtgaat gaatgtgcag atccaagagc ttgccagag catgcaactt gtaataacac tgttgaaac tactctgtt tctgcaacc aggatttgaa tccagcagtg gccacttgag ttgccagggt ctcaaaagcat cgtgtgaaga tattgatgaa tgcactgaa tgtgccccat caattcaaca tgcaccaaca cctctggag ctacttttgc acctgccacc ctggctttgc accaagcagt ggacagttga atttcacaga caaggagtg gaatgtagag atattgatga gtgcgcca gatccatcaa cctgtgttcc taattctatc tgcaccaatg ccctgggctc ctacagctgt gctgcattg taggctttca tcccaatcca gaaggctccc agaaagatgg caacttcagc tgcctgaggg tctcttcaa atgtaaggaa gatgtgatac ccgataataa gcagatccag caatgccag agggaaaccg agtgaacct gcatagtct ccttttgtgc acaataaat aacatcttca gcgttctgga caaagtgtgt gaaaataaaa cgaccgtagt tttcttgaag aatacaactg agagctttgt cctgtgtgtt aaacaaatat ccatgtggac taaattcacc aaggaaagaga cgtcctcctt gccacagtc ttcctggaga gtgtggaaag catgacactg gcactctttt ggaaccctc agcaaatgtc actccggctg ttcggggcga atacttagac attgagagca agttatcaa caaagaatgc agtgaagaga atgtgacgtt ggaacttgga gccaaagggg ataagatgaa gatcgggtgt tccacaattg aggaatctga atccacagag accactgggt tggcttttgt cctctttgtg ggcatgggaat cggttttaaa tgagcgcttc ttccaagacc accaggctcc cttgaccacc tctgagatca agctgaagat gaattctcga gtctgtgggg gcataatgac tggagagaag aaagacggct tctcagatcc aatcatctac actctggaga acgttcagcc aaagcagaag tttagagagg ccatctgtgt ttcctggagc actgatgtga aggggtggaag atggacatcc tttagctgtg tgatccctga agcttctgag acatatacca tctgcagctg taatcagatg gcaaatcttg ccgttatcat ggcgtctggg gagctcaga tggacttttc ctgtacatc attagccatg taggcattat catctccttg gtgtgcctcg tcttgccat cggccacctt ctgctgtgtc gctccatccg aaatcacac acctacctcc acctgcacct ctgcgtgtgt cctccttg cgaagactct cttcctcgcc ggtatacaca agactgaca caagcgggc tgcgccatca	

[illegible]

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 ccataaaatg taagaaaagc tgcagggct ggtgacgtt agccttctc aataaacctg
 tcatgtgcg atcctt

Coupled Receptor GPR30	93	Cholecystoki nin A Receptor	NM_000730	978	LSCLYTIFLF PIGFVGNILI LVVNISFREK MTIPDLYFIN LAVADLILVA DSLIEVFNH sapiens
					ERYDYDIAVLC TMSLFLQVN MYSSVFFLTW MSFDRIYALA RAMRCSLFRT KKHARLSCGL sapiens
					IWMASVSATL VPFTAVHLQH TDEACFCFAD VREVQWLEVT LGFIVFPFAII GLCYSLIVRV sapiens
					LVRARHRHGL RPRRQKALRM ILAVLVVFFV CWLPENVFIS VHLLQRTQPG AAPCKQSFRR sapiens
					AHPLTGHIVN LAAFNSCLN PLIYSFLGET FRDKIRLYIE QKTNLPALNR FCHAALKAVI sapiens
					PDSTEQSDVR FSSAV sapiens
					ggaatggctg aaaaagccca cacctggaaa tcactccctc cctgtccctc cagggcaggt A sapiens
					tgcatctgcg agacgcttcg gtcattagag gaatgagccg ggagtgaagca attcaccagc sapiens
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					ttcagcgcca acgctggcg ggctacgac accgctccg cagagcgccg cctctcagga sapiens
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					agtggggcca tgattggttt ctaggcagtt caaagcagga tatgttaagt aacactcaac sapiens
					catcag sapiens

95	1103	Corticotropin releasing factor Receptor 2	NP_001883	MSASVPPQ	TSSCVNPIIY CFMNRFRLG FMATFPCCPN PGPPGARGEV GEEEGGTGTG ASLSRFSYSH	atggacgcgg cactgctcca cagcctgctg gagccaact gcagcctggc gctggctgaa A gagctgctct tggacggctg ggggccacc ctagaccocg aggtgcccta ctctactgc aacacgacct tggaccagat cggaaacgtg tggccccgca gcgtgcccgg agccctcgtg gagaggccgt gccccgagta cttcaacggc gtcaagtaca acacgacccg gaatgcctat cgagaatgct tggagaatgg gacgtgggccc tcaaatgaca actactaca gtgtgagccc atttggatg acaagcagag gaagtatgac ctgcactacc gcacgcctt tgtcgtcaac tacctgggcc actgcgtatc tgtggcagcc ctggtggccg ccttcctgct tttcctggcc ctgcggagca ttgcgtgtct gcggaatgtg attcactgga acctcatcac cacctttatc ctgcgaaatg tcatgtggtt cctgctgcag ctccgtgacc atgaagtga cgaagcaat gaggtctggt gccactgcat caccaccatc tcaactact tctggtgac caactcttc tgatgtttt tgaaggctg ctacctgcac acggccattg tcatgacctc ctccactgag cgctgcgca agtgcctctt cctcttcac ggaatgtgca tcccttccc catcatcgtc gcctgggcca tggcaagct ctactatgag aatgaacagt gctggtttgg caaggagcct ggcagacctg tggactacat ctaccaaggc cccatcttc tctgctctct gatcaattc gtatttctgt tcaacatcgt caggatccta atgacaaagt tacggcgctc caccacatcc gagacaatcc agtacaggaa ggcagtgaag gccacctgg tgcctctgcc cctcctgggc atcacctaca tgccttctt cgtcaatccc ggggaggagc acctgtcaca gatcatgttc atctatttca actccttctt gcagtcttc cagggtttct tctgtctgt ctctactgc ttcttcaatg gagaggtgct ctacgacctg aggaagaggt ggcacgcgtg gcaggacct cactcccttc ggtcccccac ggcgcgggcc atgtccatcc ctacatcacc cacacggatc agcttcaca gcatcaagca gacggccgt gtgtgacccc tgggtgccc acctgcacag ctcccctgtc ctccctacc ttcttctct tgggttctctg tctggggcag gctctcgtg ggcaggagat gggaggggag agaccagctc tccagcctgg caggaaagag ggggtgcggc agccaagggg gactgcaagg gacagggat agtgggggcc accaggctca gcgcaagagg aagcagaggg aattcacagg acccctgag aagagccagt cagatgtctg caggcattg cccatccag cctctctggc cagggcctta ctgggcccag agcagagaag gacctgtcca acacacacag ctatttatag tagcagacac agggctcccc tgcctactc atggagccag cagccaggca atggtgtggc cctgcactgg ccttggact ccacactcag tgggtccctg cagttgggtg ggttaacgcc aagcaaaagg tcaagtttggc tgcctatcc cagggtgtc acctagagag gctcacttgt acccaccct gttcctgtgt cccctcccc gccatccctc ccgcttggg ggtcccatga aggatgcagg cttccaggcc tggcttctc tcttgggaga ccccctctct gcttagtcca cagattaggc aatcaaggaa gacgccatca ggaagccac atccttagtc aaccagttgc atcgtgcggg gcaaatag gagcagaggc atggaggagg gaggcgtggg atgggaatag cagaaccacc atgtcttcag tgattgaac tcataccca ttgccccttg cctccagtc tccccttcag aaacatctct gctcctgtg aaataacca tgctctcttg	Homo sapiens
96	1103	Corticotropin releasing factor	NP_001874.1	MDAALLHSL	ERPCPEYFNG VKYNTNRNAY RECLENGTWA SKINYSQCEP ILDDKQRYD LHYRIALVNV YLGHCVSVAA LVAELLFLA LRSIRCLRNV IHNWLTTFI LRNVWFWLLQ LVDHEVHESN	atggacgcgg cactgctcca cagcctgctg gagccaact gcagcctggc gctggctgaa A gagctgctct tggacggctg ggggccacc ctagaccocg aggtgcccta ctctactgc aacacgacct tggaccagat cggaaacgtg tggccccgca gcgtgcccgg agccctcgtg gagaggccgt gccccgagta cttcaacggc gtcaagtaca acacgacccg gaatgcctat cgagaatgct tggagaatgg gacgtgggccc tcaaatgaca actactaca gtgtgagccc atttggatg acaagcagag gaagtatgac ctgcactacc gcacgcctt tgtcgtcaac tacctgggcc actgcgtatc tgtggcagcc ctggtggccg ccttcctgct tttcctggcc ctgcggagca ttgcgtgtct gcggaatgtg attcactgga acctcatcac cacctttatc ctgcgaaatg tcatgtggtt cctgctgcag ctccgtgacc atgaagtga cgaagcaat gaggtctggt gccactgcat caccaccatc tcaactact tctggtgac caactcttc tgatgtttt tgaaggctg ctacctgcac acggccattg tcatgacctc ctccactgag cgctgcgca agtgcctctt cctcttcac ggaatgtgca tcccttccc catcatcgtc gcctgggcca tggcaagct ctactatgag aatgaacagt gctggtttgg caaggagcct ggcagacctg tggactacat ctaccaaggc cccatcttc tctgctctct gatcaattc gtatttctgt tcaacatcgt caggatccta atgacaaagt tacggcgctc caccacatcc gagacaatcc agtacaggaa ggcagtgaag gccacctgg tgcctctgcc cctcctgggc atcacctaca tgccttctt cgtcaatccc ggggaggagc acctgtcaca gatcatgttc atctatttca actccttctt gcagtcttc cagggtttct tctgtctgt ctctactgc ttcttcaatg gagaggtgct ctacgacctg aggaagaggt ggcacgcgtg gcaggacct cactcccttc ggtcccccac ggcgcgggcc atgtccatcc ctacatcacc cacacggatc agcttcaca gcatcaagca gacggccgt gtgtgacccc tgggtgccc acctgcacag ctcccctgtc ctccctacc ttcttctct tgggttctctg tctggggcag gctctcgtg ggcaggagat gggaggggag agaccagctc tccagcctgg caggaaagag ggggtgcggc agccaagggg gactgcaagg gacagggat agtgggggcc accaggctca gcgcaagagg aagcagaggg aattcacagg acccctgag aagagccagt cagatgtctg caggcattg cccatccag cctctctggc cagggcctta ctgggcccag agcagagaag gacctgtcca acacacacag ctatttatag tagcagacac agggctcccc tgcctactc atggagccag cagccaggca atggtgtggc cctgcactgg ccttggact ccacactcag tgggtccctg cagttgggtg ggttaacgcc aagcaaaagg tcaagtttggc tgcctatcc cagggtgtc acctagagag gctcacttgt acccaccct gttcctgtgt cccctcccc gccatccctc ccgcttggg ggtcccatga aggatgcagg cttccaggcc tggcttctc tcttgggaga ccccctctct gcttagtcca cagattaggc aatcaaggaa gacgccatca ggaagccac atccttagtc aaccagttgc atcgtgcggg gcaaatag gagcagaggc atggaggagg gaggcgtggg atgggaatag cagaaccacc atgtcttcag tgattgaac tcataccca ttgccccttg cctccagtc tccccttcag aaacatctct gctcctgtg aaataacca tgctctcttg	Homo sapiens

[illegible]

127/448

98	1240	Dopamine Receptor D1	NP_000785.1	<p> MRTLNTSAMD GTGLVVERDF SVRIITACFL SLLILSTLLG NTLVCAAVIR FRHLRSKVTN P FFVISLAVSD LLVAVLMPW KAVAEIAGFW PFGSFCNIWV AFDIMCSTAS ILLNLCVISVD RYWAISSPER YERKMTPKAA FILISVANTL SVLISFIPVQ LSWHKAKPTS PSDGNATSLA ETIDNCDSSL SRTYAISSSV ISFYIPVAIM IVTYTRIYRI AQQIRRIAA LERAAVHAKN CQTTTGNKRP VECSQPESSF KMSFKRETKV LKTLSSVIMGV FVCCWLPEFFI LNCILPFCGS GETQPFICIDS NTFDVFVWFG WANSSINPII YAFNADFERKA FSTLLGCYRL CPATNNAIET VSINNNGAAM FSSHHEPRGS ISKECNLVYL IPHAVGSSSED LKKEEAAGIA RPLEKLSPAL SVILDYDIDV SLEKIQIPITQ NGQHPT ggcacgagcg agggctgaag ttgggacgcg gcacagacgc cccctgcagt ccagcccgaa A atgtcttcgg gcttcagaat tgtttttaga aattattct tatcttagga ttaccacaaat agggcaaga atcaacagtg aacagcttca cttaaaatca aattttctg ggaagaaat gagatgggtt gagtgtgctg tatacaaca ggtgctaaca ctgttcccg caaagttttc agattgtaaa gtagagtgca tgccttcata aattattct aaacattaa ttgaggtta cagtaggagt gaaaaattt ttccagaat tgagagatgt tttgttgata ttggttctat ttattttatg tataatgga tatttttaat ttatgatata ataatatata attatcata tttaatatgga taaattaatg agttttatcc aagaccttac aaccacattt ctggccattt aactagcact ttataagcca atgaagcaaa cacacagact ctgtgagatt ctaaatgttc atgtgtaact tctaga </p>	Homo sapiens
99	1241	Dopamine Receptor D5	NM_000798	<p> ggcacgagcg agggctgaag ttgggacgcg gcacagacgc cccctgcagt ccagcccgaa A atgtcttcgg gcttcagaat tgtttttaga aattattct tatcttagga ttaccacaaat agggcaaga atcaacagtg aacagcttca cttaaaatca aattttctg ggaagaaat gagatgggtt gagtgtgctg tatacaaca ggtgctaaca ctgttcccg caaagttttc agattgtaaa gtagagtgca tgccttcata aattattct aaacattaa ttgaggtta cagtaggagt gaaaaattt ttccagaat tgagagatgt tttgttgata ttggttctat ttattttatg tataatgga tatttttaat ttatgatata ataatatata attatcata tttaatatgga taaattaatg agttttatcc aagaccttac aaccacattt ctggccattt aactagcact ttataagcca atgaagcaaa cacacagact ctgtgagatt ctaaatgttc atgtgtaact tctaga </p>	Homo sapiens

100	1241	Dopamine Receptor D5	NP_000789.1	<p>tatcagacgt cccagatgg tgacctgtt gctgagtctg tctgggagct ggactgcgag gggagattt ctttagacaa aataacacct ttcaccccg atggattcca ttaactgca ttaagaaacc cctcatgga tctgcataac cgcacagaca ctgacaagca cgcacacaca cgaaaataca tgcctttcca gtgctgctcc ctttatcatg tgtttctgtg tagtagctcg tgtgcttaga aacctcacc cattgattgg tagttcgaag aattggcaga atcagttgca ataaactcag tcaaatgtac ccagcctacc agagatggac caacgatcct atgagagaag agagtatggt gctgggtcct taaaaaaaa aatgatactt ggtccttaaa aatatgtctc tcccctcctt ttttaacaa atggctgtgt cagtcacttg tttgtgtttg aattgatttt taaacagcag gttgtgtgtg tgtgcagtga tgtgtggga gcacagcttt cctgggtctg gattccccgt gctttgtgt tatgtcattt cttctctctg tgctgtggg ggcctcttta ccatagctta agaagtatcc ctgatttatt ctggtgtcta ataaacacag attatttga aaaaaaaa aaaaaaaaa aa</p>	Homo sapiens
101	1242	Dopamine Receptor D2	NM_000795	<p>MLPPGSNGTA YPGQFALYQQ LAQGNVGGG AGAPPLGPSQ VVTACLLTLL IIWTLGNVL P VCAAIVRSRH LRANMTNVFI VSLAVSDLEF ALLVMPWKAV AEVAGYWPFG AFCDVWVAFD IMCSTASILN LCVISVDRYW AISRPFRYKR KMTQRMALVM VGLAWTLSIL ISFIPVQLNW HRDQAASWGG LDLPNNLANW TPWEEDFWEP DVNAENCDS LNRTYAISSS LISFYIPVAI MIVTYTRIYR IAQVQIRRIIS SLERAHEHAQ SCRSSAACAP DFVFWFGWA NSSLPVITYA IMGVFCVCCWL PFFILNCMPV FCSGHEGPP AGFPCVSETT FVHKEIAAAY IHMPNAVTP FNADFQKVEA QLLGCSHFCS RTPVETVNIS NELISYNQDI GEISLDKITP FTPNGFH GNREVDNDEE EGPFDRMFQI YQTSPPDGPV AESVWELDCE GEISLDKITP FTPNGFH agagcctggc caccagtggt ctccaccgc ctgagtgttc cactgaatct gtcctggtat A gatgatgat tggagaggca gaactggagc cggcccttca acgggtcaga cgggaaggcg gacagacccc actacaacta ctatgccca ctgctcacc tgctcatcgc tgctcatcgc ttcggcaacg tgctggtgtg catggctgtg tcccgcgaga agcgctgca gaccacacc aactacctga tctgcagcct cgcagtggcc gacctcctcg tgcacacact ggtcatgccc tgggttgtct acctggaggt ggtagtgag tggaaattca gcaggattca ctgtgacatc ttcgtcactc tggacgtcat gatgtgacg gcgagcatcc tgaacttgtg tgccatcagc atcgacaggt acacagctgt ggccatgccc atgctgtaca atacgcgcta cagctccaa cgccgggtca ccgtcatgat ctccatcgtc tgggtcctgt ccttcacat ctcctgccc ctcctcttcg gactcaataa cgcagaccag aacgagtga tcatggcaa cccggccttc gtggtctact cctccatcgt ctccttctac gtgcccctca ttgtcacct gctggtctac atcaagatct acattgtcct ccgcagacgc cgcaagcgag tcaacaccaa acgcagcagc cgagctttca gggccacct gaggtctcca ctgaaggga actgtactca ccccgaggac atgaactct gcacgttat catgaagtct aatggaggt tccagtgaa caggcgaga gtggaggctg cccggcgagc ccaggagctg gagatggaga tgtctccag caccagccca cccgagagga cccggtacag cccatccca cccagccacc accagtgac tctcccagc ccgtccacc atggtctcca cagcactccc gacagcccc ccaaacaga gaagaatggg catgccaaag accacccaa gattgccaa atctttgaga tccagacct gcccaatggc aaaaaccgga cctccctcaa gacctgagc cgtaggaagc tctccagca gaaggagaag aaagccactc agatgtctgc catgttctc ggcgtgttca tcatctgtg gctgcccctc ttcatcacac acatcctgaa catacactgt gactgcaaca tcccgcctgt cctgtacagc</p>	Homo sapiens

102	1242	Dopamine Receptor D2	NP_000786.1	<p> gacctacgt ggctggggcta tgtcaacagc gccgtgaacc ccatcatcta caccacctc aacattgagt tccgcaaggc ctctctgaag atctccact gctgactctg ctgctgccc gcacagcagc ctgcttccca cctccctgcc caggccggcc agctcacc cttgcaaacg tgagcaggaa ggctggggtg gatcgccctc ctctcttag cccggcagg cctgcaagt ttcgcttggc tccatgctcc tcactgccc caccacctca ctctgccagg gcagtgcctag tgagctgggc atggtaccag cctggggct ggcctcctt ggcacaaaag atgcagccgc ctctctgac ccccctcca cctccagtc ttgcttaggg agcaggcgtt gggagagat ggcagttca caccctgcaa ctttgtggg cttggcgtgg agcaggcgtt gggagagat ggcagttca caccctgcaa ggccacagg aggcaagcaa gctctctgc cgaggagca ggcacactca gtcctgggag acctatgtaa ataccagact gcagggttgg cccgagagat tcccaagcca aaacaccttag ctccctccc caccctgat tggacctcta cttccaggc tagtcgggac ccacctcacc ccgttacagc tcccaagt gttccacat gctctgagaa gaggagccct catcttgaag ggccaggag ggtctatgg gagaggaaact ccttggccta gccacctg ctgcttctg acggccctgc aatgtatccc ttctcacagc acatgctggc cagcctgggg cctggcaggg aggtcaggcc ctggaactct atctgggctt gggctaggga catcagaggt tcttgaggg actgcctctg ccacactctg acgcaaaacc acttctctt tctattcctt ctggccttc ctctctctg tttcccttcc ctctcactgc ctctgcctta gaggagccca cggctaagag gctgctgaaa acctctggc ctggcctggc cctgcctga ggaaggaggg gaagctgcag cttgggagag cccctgggc ctgagactctg taacatcact atccgatgca ccaactaat aaaacttga cgagtcacct tc </p>	Homo sapiens
103	1243	Dopamine Receptor D3	NM_000796	<p> taaaagaaac ggatacattc gaaagcagct atgaacacatg cactaaggctc taataggga A gctggaaaag cagcactcaa gtaatttcac cttagaggga aaaaagggtg attctttct gttcatttca tagtttctga gtcctgagaa aggcaaaagt tgccttgctt gggatgtct gctgtcagta aatggctgca ggagccgaag tggtaaacctc ctgggtctcc agaaatcaga agaaaatttt aggaagcccc ttggcaccac gcacctccct ctgggctatg gcactctga gtcagctgag tagccacctg aactacacct gtggggcaga gaactccaca ggtgccagcc aggcccgccc acatgcctac tatgcccctt cctactgccc gctcactctg gccatcgtct tcggcaatgg cctggtgtgc atggtgtgc tgaaggagcg ggccttgag actaccacca actacttagt agtgagcctg gctgtggcag acttgcctgtt ggcacacctg gtgatgccct gggtgggata cctggagggtg acagggtggag tctggaattt cagccgattt tctgtgatg ttttgtcac cctggatgct atgatgtgta cagccagcat ccttaattctc tgtgccatca gcatagacag gtacactgca gtggtcatgc ccgttccacta ccagcatggc acgggacaga </p>	Homo sapiens

104	1243	Dopamine Receptor D3	NP_000787.1	<p>gctcctgtcg gcgctggcc ctcatgatca cggccgtctg ggtactggcc ttgctgtgt</p> <p>cctgccctct tctgtttggc tttataacca caggggacc cactgtctgc tccatctcca</p> <p>accctgattt tgtcatctac tcttcagtgg tgtccttcta cctgcccttt ggagtactg</p> <p>tcttgtcta tgcagaatc tatgtggtgc tgaacaaaag gagcggaaa aggatactca</p> <p>ctgcacagaa cagtcagtgc aacagtgtca ggcctggctt ccccaacaa accctctctc</p> <p>ctgacccggc acatctggag ctgaagcgtt actacagcat ctgccaggac actgccttgg</p> <p>gtggaccagg cttccaagaa agaggaggag agttgaaaag agaggagaa actcggaatt</p> <p>ccctgagtcc caccatagcg cccaagctca gcttagaagt tcgaaaaactc agcaatggca</p> <p>gattatcgac atctttgaag ctggggcccc tgcaacctcg gggagtggca cttcggggaga</p> <p>agaaggcaac ccaaatggtg gccattgtgc ttggggcctt cattgtctgc tggctgccct</p> <p>tcttcttgac ccatgttctc aataccact gccagacatg ccacgtgtcc ccagagcttt</p> <p>acagtggcac gacatggctg ggctacgtga atagcgcct caacctgtg atctatacca</p> <p>ccttcaatat cgagttcccg aaagccttcc tcaagatcct gtcttgctga gggagc</p>	Homo sapiens
				<p>MASLSQLSSH INYTCGAENS TGASQARPHA YYALSICALI LAIVEGNGLV CMAVLKERAL P</p> <p>QTTTNYLVVS LAVADLLVAT LVMPWVYLE VTGGWNFSR ICCDVFVTL D VNMCTASILN</p> <p>LCAISIDRYT AVMPVHYQH GTGQSSCRV ALMITAVWVL AFAVSCPILL GFNTTGDPTV</p> <p>CSISNPDEVI YSSWSFYLP FGTVLVYAR IYVLKQRRR KRILTRQNSQ CNSVRPGFPQ</p> <p>QTLSPDPAHL ELKRYYSICQ DTALGGPGFQ ERGELKREE KTRNSLSPTI APKLSLEVRK</p> <p>LSNGRLSTSL KLGPLQPRGV PLREKKATQM VAIVLGAFLV CWLPFFLTHV LNTHCQTCHV</p> <p>SPELYSATW LGYVNSALNP VIYTFNIEF RKAFLKILSC</p>	
105	1244	Dopamine Receptor D4	NM_000797	<p>atggggaaac gcagcaccgc ggacgcggac ggctgtctgg ctgggcgcgg gccggccgcg A</p> <p>ggggcatctg cgggggcatc tgcggggctg gctgggcagg gcgcgcgcgc gctggtgggg</p> <p>ggcgtgctgc tcatcgccgc ggtgtctgcg gggaaactgc tegtgtcgt gacgtggcc</p> <p>accgagcgcg cctgcagac gccaccaac tcttctcatg tgagcctggc ggcgcgcgc</p> <p>ctctcctcg ctctcctggt gctgcgctc ttcgtctact ccgaggtcca ggtgggcgcg</p> <p>tggctgctga gccccgcct gtgcgacgc ctcattggcca tggacgtcat gctgtgcacc</p> <p>gcctccatct tcaacctgtg cgcctacgc gtggacaggt tegtggccgt gccgtggccg</p> <p>ctgcgtaca accggcaggg tgggagccgc cggcagctgc tgctcatcgg cgcacgtgg</p> <p>ctgctgtccg cggcgggtgg gcgcgccgta ctgtgcggcc tcaacgacgt gcgcggccgc</p> <p>gaccccgccg tgtgccgcct ggagaccgc gactacgtgg tctactcgtc cgtgtgctcc</p> <p>ttcttcttac cctgcccgt catgctgctg ctctactggg ccacgttccg cggcctgcag</p> <p>cgttgggagg tggcacgtcg cgcacaagctg cacggccgcg cgcgcgcgcg acccagcggc</p> <p>cctggccgc ctccccccac gccaccgcg cccgcctcc cccaggacc ctgcggcccc</p> <p>gactgtgcgc ccccgcgcc cggccttccc cggggtccct gggccccga ctgtgcgcc</p> <p>gccgcgccg gctcccccc ggacctcgc ggcgccgact gtgcgccccc cgcgcgcggc</p> <p>ctccccagg acccctgcgg ccccgactgt gcgcgcgcgc cgcgcgcct tccccgggt</p> <p>ccctggggc cggactgtgc gcccccgcg cccggcctcc cccaggacc ctgcggcccc</p> <p>gactgtgcgc ccccgcgcc cggcctcccc cgggacctcc cgggtctcaa ctgtgtccc</p> <p>cccgacgcgc tcagagccgc cgcgctccca cccagactc cccgcagac ccgcaggagg</p> <p>cggcgtgcca agatcacgg ccgggagcgc aaggccatga gggctctgcc ggtggtggtc</p> <p>ggggccttcc tctgtgtctg gacgccccctc tctgtggtgc acatcacgca ggcgtgtgt</p>	Homo sapiens

106	1244	Dopamine Receptor D4	NP_000788.1	<p>cctgcctgct cctgcccc cgggtggtc agcgccgtc cctggctggg ctacgtcaac agcgccctca acccgctcat ctacactgtc ttcaacgcg agttccgcaa cgtcttcgcg aaggccctgc gtgctgctg ctgagccggg caccgccgga cggcccccgg cctgatggcc aggcctcagg gaccaaggag atggggaggg cgtttttgta cgttaattaa acaaatcctc tccc</p> <p>MGNRSTADAD GLLAGRGPA GASAGASAGL AGQAAAALVG GVLIGAVLA GNSLVCVSV A P TERALQTPTN SFIVSLAAD LLLALLVLEL FVYSEVQGA WLLSRLCDA LMAMDVMLCT ASIFNLCAIS VDFEVAVAP LRYNRQGSR RQLLLIGATW LLSAAVAAPV LCGLNDVRGR DPAVCRLEDR DYVYSSVCS FFLPCPLMLL LYWATERGLQ RWEVARRAKL HGRAPRRPSG PGPPSPTPPA PRLPQDPCGP DCAPPAPGLP RGPCGPDCAP AAPGLPPDPC GPDCAAPPAG LPQDPCGPDG APPAPGLPRG PCGPDCAPPA PGLPQDPCGP DCAPPAPGLP PDPCGSNCAP PDAVRAAALP POTPPQTRRR RRAKITGRER KAMRVLPLVV GAFLLCWTPF FVHITQALC PACSVPPRLV SAVTWLGYW SALNPVIYTV FNAEFNRVER KALRACC</p>	Homo sapiens
107	1267	Opioid Receptor, delta 1 (OPRD1)	NM_000911	<p>ccgaggagcc tgcgtgctc ctggctcaca gcgtccggg cgaggagagc gggcgagccg A gggggctggg ccggtgctgg cgcgaggga ggcggacgag gcgcagagac agcggggcgg ccggggcgcg gcacggcgcg ggtcggggcc ggcctctgcc ttgcgctcc cctcgcgtcg gatccccg cccaggcagc cgggtggagag ggacggcgcg gacgcggga gccatgggaa cgccccctc cgcggcgcc gagctgcag cccgctctt cgcgaacgcc tcggacgcct accctagcgc cttcccagc gctggcgcca atgcgtcggg gccgcaagg ccggggagcg cctcgtccct cgcctggca atcgccatca cgcgctcta ctcggccgtg tgcgcctgg ggctgctggg caacgtgctt gtcattgtcg gcctgtccg gtacactaag atgaagacgg ccaccaacat ctacatcttc aacctggcct tagccgatgc gctggccacc agcacgctgc ctttccagag tgccaagtac ctgatggaga cgtggccctt cggcgagctg cctgcaagg ctgtgctctc catcgactac tacaatatgt tcaccagcat ctccagctc accatgatga gtgttgaccg ctacatcgct gctgccacc ctgtcaaggc cctggacttc cgcacgacctg ccaaggccaa gctgatcaac atctgtatct cgtccccggg acggtgcagt cccagttcc tcatggtcat gctgtgacc cgtccccggg cgtccccggg cgtgtgcagt cccagttcc ccagccccag ctggtactgg gacacgggta ccaagatctg cgtgttctc ttcgcttcg tggtgcccc cctcatcatc accgtgtgct atggcctcat gctgctgcg ctgcgcagtg tgccctgct gtcgggctcc aaggagaagg accgcagcct gggcgcatc acgcgcatgg tgctggtggt tctggcgcc ttcgtggtgt gttggcgcc catccatc ttcgtcatcg tctggacgt ggtggacatc gaccggcgcg acccgctggt ggtggctggc ctgcacctgt gcatcgctg ggtctacgcc aatagagcc tcaacccctg gctctacgct tctctcgag agaacttcaa gcgtgcttc cgcagctct cccgcaagg ctcggcgccg ccagacccca gcagcttcag cggccccgc gaagccacgg cccgcgagcg tgtaaccgcc tgacccccg ccgatggtcc cggcggtggc cgtgcgcct gaccaggcca tccggcccc agacccccct ccctagtgt acccgaggc cacatgagtc ccagtgggag gcgcgagcca tgatgtggag tggggccagt agataggtcg gagggctttg ggaccgccag atggggcctc tgttccggag acgggaccgg gccgctagat gggcatgggg tggcctctg gtttggggcg aggcagagga cagatcaatg gcgcagtgc tctggtctg gtgccccctt ccacggctct aggtggggcg ggaaagccag tgactccagg agaggagcg gacctgtggc tctacaactg agtctttaa</p>	Homo sapiens

108	1267	Opioid Receptor, delta 1 (OPRD1)	NP_000902.1	cagggcatct ccaggaaggc gggggttcaa ccttgagaca gcttcgggtt ctaacttggg gccggacttt cggaggtggg ggggtccgggg ccc AVGLLGNVLV MEGIVRYTKM KTATNIYFN LALADALATS TLPQSAKYL METWPFCELL CKAVLSIDYY NMETSIPTLT MMSVDRIYAV CHPVKALDFR TPAKAKLINI CIWVLASGVG VPIMWAVTR PRDGAIVCML QFPSPSWYWD TVTKICVFLF AFVVPILIT VCYGLMLLRL RSVRLLSGSK EKDRSLRIT RMVLVVGAF VWCWAPIHIF VIVMTLVDID RRDPLVVAAL HLCIALGYAN SSLNPVLYAF LDENFKRCFR QLCRKPCGRP DPSSFRRPRE ATARERTAC TPSDGPGGGR AA	Homo sapiens
109	1424	Duffy Antigen	NM_002036	gggcctgaac caaacggtgc catggggaac tgtctgcaca ggggtgagtat ggggccaggc A cccagagtc cttatcccta tgcccctcat ttcccctgct gtttgcccct cagtctttat atctcttct tttctctctc atcttttctc ccttcccgt ttttctctct tcttccaaag tcttttctc tctctcttc ctatgctagc ctctagctc cctcttggt ccttcccttt gcctttgagt cagttccatc ctggtctctt ggtgccttc ctctgacct tgcactgctc ctccagccc agctgcccctg gcttcccag gactgttctt gctccggctc ttccaggctc ctgctttgtc ctttccact gtcgcactg catctgactc ctgcagagac ctgtgtctcc caccgacct tctctctgt cctcccctc cactgccc tcaattccca ggagactctt ccggtgaac tctgatggc tctctgggt atgtctcca ggcggagctc tccccctcaa ctgagaactc aagtcagctg gacttcgaag atgtatgaa ttcttctat ggtgtgaatg attccttccc agatggagac tatgatgcca acctgcccc tgcactcct gtaacctgt gtagactct gactgccc tcttcatct caccagtgc ctgggtatcc tagctagcag cactgtctc ttcagtctt tcagacctt ctccgctgg cagctctgcc ctggctggc tgcctggca cagctggctg tgggcagtg cctcttcagc attgtggtc ccgtcttggc ccagggcta gtagcactc gcagctctgc cctgtgtagc ctgggctact gtgtctgga tggctcagc tttgcccagg ccttgctgt aggttgccat gcctccctgg gccacagact ggtgcaggc caggtcccag gcctcaccct ggggtcact gtgggaattt gggagtggc tgcctactg acactgctg tcaccctggc cagtgtgct tctggtggac tctgcacct gatatacagc acggagctga aggttttga ggcacacac actgtagcct gtcttgccat cttgtcttg ttgccattgg gttgttttg agccaaaggg ctgaagaagg cattgggtat ggggccaggc ccttgatga atactctgt ggcctgggtt atttctggt ggcctcatgg ggtggttcta ggaactgatt tctggtgag tccaagctg ttgctgtgt caacatgtct ggcacagcag gctctggacc tctgctgaa cctggcagaa gccctggcaa ttttgactg tgtggctacg cccctgctc tcgccctatt ctgccaccag gccaccgca ccctctgccc ctctctgccc ctccctgaag gatgtcttc tcatctggac accctggaa gcaaatccta gttctcttc cactgtcaa cctgaattaa agtctacact gcctttgtg NP_002027.1 MASSGYVLOA EISPSTENSS QLDFEDVWNS SYGVNDSFPD GDYDANLEAA APCHSCNLLD P DSALPFFILT SVLGILASST VLFMLFRPLF RWQLCPGWPV LAQLAVGSAL FSIVVPVLAP GLGSTRSSAL CSLGYCVWYG SAFAQALLLG CHASLGHRLG AGQVPGITLG LTVGIWGVAA LLTLPVTLAS GASGGLCTLI YSTELKALQA THTVACLAI FVLLPLGLFGA KGLKKALGMG PGPWNILWA WFIFWPHGV VLGLDFLVR KLLLLSTCLA QQALDLLNL AEALAILHCV ATPLLLALFC HQATRTLPS LPLPEGWSSH LDTLGSKS	Homo sapiens

111	1451	EBV-Induced Gene 2	NM_004951	ggaattccct gatatacacc tggaccacca ccaatggata tacaatggc aaacaatttt A actccgccct ctgcaactcc tcagggaat gactgtgacc tctatgcaca tcacagcacg sapiens gccaggatag taatgcctct gcattacagc ctgctcttca tcatgggct cgtgggaac ttactagcct tggctgctat tgttcaaac aggaataaaa tcaactctac caccctctat tcaacaaatt tggtgatttc tgatatactt ttaccacccg cttgctac acgaatagcc tactatgcaa tgggctttga ctggagaatc ggagatgcct tgttaggat aactgcgcta gtgttttaca tcaacacata tgcaggtgtg aactttatga cctgctgag tattgaccgc ttcattgctg tggtgaccc tctacgctac aacaagataa aaaggattga acatgcaaaa ggcgtgtgca tattgtctg gattctagta ttgtctaga cactccact cctcatcaac cctatgtcaa agcaggaggc tgaaggatt acatgcattg agtatccaaa ctttgaagaa actaaatctc ttcctggat tctgcttggg gcattgttca taggatatgt acttccactt ataatcattc tcattgtcta ttctcagatc tctgcaaac tcttcagaac tgccaaacaa aaccactca ctgagaaatc tgggttaac aaaaaggctc tcaacacaa tattcttatt attgttgtgt ttgttctctg ttccacact taccattgtt caattattca acatatgatt aagaagcttc gtttctctaa ttctctgaa tctagccaaa gacattcgtt ccagatttct ctgcacttta cagtatgcct gatgaactc aattgctgca tggacccttt tatctacttc tttgcattga aagggtataa gagaaaggtt atgaggatgc tgaacggca agtcagtga tcgatttcta gtgctgtgaa gtcagccct gaagaaaatt cactgaaat gacagaaacg cagatgatga tacattccaa gtcttcaaat ggaagtgaa atggattgta ttttggtta tagtgacgta aactgtatga caaactttgc agacttccc ttataaagca aaataattgt tcagcttcca attagtattc ttttatattt ctttcatgg gcacttccc atctccaact cggaagtaag ccaagagaa caacataaag caacacaaat aaagcacaat aaaaatgcaa ataaatattt tcatttttat ttgtaaacga atacacaaa aggaggcgt cttataaact cccaatgtaa aaagtgtgt tttaataaaa aatttcttg ccaacaaaatg gttagaaagg actgaataga ttatatattg ccagatgta atacttttta aataacatat ttcttaaatc caaatttctc tcaatgttag atttaattcc ctcaataaca ccaatgtttt gttttgttc gtctgtggtc ataaaacttt gtttaaggaa tcttttgaa taaagagcag gatgctgc 112 1451 EBV-Induced NP_004942.1 MDIQMANNFT PPSATPOGND CDLYAHHSTA RIVMPLHYSL VFIIGLVGNL LALVVIVQNR P Homo sapiens K KINSTTLYS TNLVISDILF TTALPTRIAY YANGFDWRIG DALCRITALV FYINTYAGVN FMTCLSIDRF IAVVHPLRYN KIKRIEHAKG VCFVWILVF AQTLPPLINP MSKQEAERIT CMEYPNFEET KSLPWILLGA CFIGYVLP LI ILICYSQIC CKLFRTAKQN PLTEKSGVKN KALNTIILII VVFLCFTPY HVAIIQHMIK KLFPSNFLEC SQHSFQISL HFTVCLMNFN CCMDPFIYFF ACKGYKRKVM RMLKRQVSVS ISSAVKSAPE ENSREMTETQ MMIHSKSSNG K 113 1486 Endothelin B Receptor NM_000115 gagacattcc ggtgggggac tctggccagc ccgagcaacg tggatcctga gagcactccc A aggtaggcat ttgccccggt gggacgcctt gccagagcag tgtgtggcag gccccgtgg aggatcaaca cagtggctga acactggga ggaactggta cttggagtct ggacatctga aactggctc tgaactgcg cagcgccac cggacgcctt ctggagcagg tagcagcatg cagcgccctc caagtctgtg cggacgcgc ctggttgcgc tggttcttgc ctgcggcctg tcgcggtatct ggggagagga gagaggctc ccgctgaca gggcactcc gctttgcaa
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114	1486	Endothelin B NP_000106.1 Receptor	<p> acatggtgct tttctttcat ctaggagcaa aactgctttt tgagaccgta agaacctctt agctttgtgc gttctgctt aattttata tcttctaagc aaagtgcctt aggatagctt gggatgagat gtgtgtgaaa gatgtacaa gagaaaacgg aagagagagg aaatgaggtg ggggtggagg aaacctatgg ggacagattc ccattcttag cctaacgttc gtcatgacct cgtcacatca atgcaaaagg tctgatttt gtccagcaa aacacagtcg aatgttctca gagtgaactt cgaataaaat tgggccaag agctttaact cggcttaaa atagcccaa atttttactt tgtttttctt ttaataggct gggccacatg ttggaataaa gctagtaatg ttgttttctg tcaatattga atgtgatgt acagtaaac aaacccaac aatgtggcca gaaagaaaga gcaataataa ttaattcaca caccatatgg attctattta taaatcacc acaacttgt tctttaattt catcccaatc actttttcag aggcctgtta tcatagaagt cattttagac tctcaatttt aaattaattt tgaatcacta atattttcac agtttattaa tataattaat tctatttaa attttagatt atttttatta ccatgtactg aatttttaca tctgataacc ctttcttctt ccatgtcagt atcatgttct ctaattatct tgccaaattt tgaactaca cacaaaaagc atacttgcat tatttataat aaaattgcat tcagtggctt tttaaaaaaa atgtttgatt caaaacttta acatactgat agtaagaaa caattataat ttctttacat actcaaaacc aagatagaaa aaggtgctat cgttcaactt caaaacatgt ttcttagtat taaggacttt aatatagcaa cagacaaaat tattgttaac atggatgta cagctcaaaa gatttataaa agattttaac ctattttctc ccttattatc cactgcta gtggatgtat gttcaaacac ctttttagtat tgatagctta catatggcca aaggaataca gtttatagca aaacatgggt atgctgtagc taactttata aaagtgtaat ataacaatgt aaaaaattat atatctgga ggaatttttg gttgcctaaa gtggctatag ttactgattt ttatttatgt aagcaaaacc aataaaaatt taagtttttt taacaactac cttattttt actgtacaga cactaatca ttaaatacta atgtattgtt taaaagaaa ataaatgtga caagtggaca ttatttatgt taaatataca attatcaagc aagtatgaag ttattcaatt aaaaagccac atttctggtc tctggg </p>	Homo sapiens
115	1488	Endothelin A NM_001957 Receptor	<p> LKFKANDHGY DNFSSNKYS SS gaattcgagg cgcctcttg cggctccaga gtggagtga aggtctggag ctttggagg A agacggggag gacagactgg agcgtgttc ctcggagatt tctttttctg tgcgagccct cgcgcgcgcg tacagtcac cgcgtggtc gagcattgtg gagaggcgtt ggagaggctt catccatccc acccggctgt cgcgggggat tggggtccca gcgacacctc cccgggagaa gcagtggcca ggaagtcttc tgaagccggg gaagtgtgc agccgaagcc gccgcccgcg cggagcccg gacacggcc accctcccg ccaccacc tcgctttctc cggcttctc tggccaggc gccgcgcgga cccggcagct gtctgcgac gccgagctcc acggtgaaaa aaaaagtga ggtgtaaaag cagcacaagt gcaataagag atatttctc aaattgctt </p>	Homo sapiens

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atatgggctc aggtcacttt tatttgaat gtcatttggt gccagtattt tttaactgca
taatagccta acatgattat ttgaacttat ttacacatag ttgaaaaaaa aaagacaaa
aatagtattc aggtgagcaa ttagattagt attttccacg tcactattta tttttttaaa
acacaaaattc taaagctaca acaataacta cagggccctta agcacagtc tgatgacaca
tttggcagtt taatagatgt tactcaaga attttttaag aactgtattt tattttttaa
atggtgtttt attacaaggg accttgaaca tgttttggat gttaaaattca aaagtaatgc
ttcaatcaga tagttctttt tcacaagttc aatactgttt tcatgtaaa tttgtatga
aaaatcaatg tcaagtacca aaatgttaat gtatgtgca tttaactctg cctgagactt
tcagtgact gtatatagaa gtctaaaaa cacctaagag aaaaagatcg aatttttcag
atgattcga aattttcatt caggtatttg taatagtgc atatatatgt atatacatat
cacctcctat tctcttaatt ttgttaaaa tgttaactgg cagtaagtct ttttgatca
ttcccttttc catataggaa acataatttt gaagtggcca gatgagtta tcatgtcagt

116	1488	Endothelin A NP_001948.1	Receptor	<p>gaaaaataat taccacaaa tgccaccagt aactaaacga ttcttcaatt ctgggggttt tcagtatgaa cctaaactcc caccacaaca tctccctccc acattgtcac catttcaaaag ggccacagtg gacttttgct gggcattttc ccagatgttt acagactgtg agtacagcag aaaatctttt actagtgtgt gtgtgtatat atataaaca ttgtaaattt ctttagcccc attttctag actgtctctg tggaatataat ttgtgtgtgt gatatagca tgtgtgtgat ggtatgtatg gatttaactt aatctaataa ttgtgcccc cagtgtgccc aaagtgcata gtctgagcta aaatctaggt gattgttcat catgacaacc tgcctcagtc cattttaacc tgtagcaacc ttctgcattc ataaatcttg taatcatgtt accattacaa atgggatata agaggcagcg tgaagcaga tgaagtgttg actagcaata taggggttttg ttgggttggt tggtttgata aagcagtatt tgggttcata ttgtttcctg tgcctggagca aaagtcatta cactttgaag tattatatgt ttcttatcct caattcaatg tggatgataa attgccaggt tgtctgatat ttctttcaga ctctgccaga cagattgtctg ataataaatt aggtaagata atgtgttggt ccataattta ggacaggtaa aataacatca ggttccagtt gcttgaattg caaggctaag aagtactgct cttttgtgtg ttagcagtc aatctattat tccactggcg catcatatgc agtgatatat gcctataata taagccatag gtccacacca tttgttttag acaattgtct ttttttcaag atgctttgtt tctttcatat gaaaaaaatg cattttataa attcagaaaag tcatagattt ctgaaggcgt caacgtgcat tttatttatg gactggtaag taactgtggt ttactagcag gaatatctcc aatttctacc ttactacat cttttcaaca agtaactttg tagaaatgag ccagaagcca aggcctgag ttggcagtg ccataaagt taaaataaaa gtttacagaa acctt</p>	Homo sapiens
117	1598	Calcium-Sensing Receptor (CASR)	NM_000388	<p>caacaggcac ctggctgcag ccaggaagga ccgcacgccc ttctcgcgag gagagtggaa A ggaggagct gtttgccagc accgaggtct tgcggcacag gcaacgcttg acctgagtct tgcagaatga aagcatcac agaggccctc tgcattgatgt ggcttccaaa gactcaagga ccaccacat tacaagtctg gattgaggaa ggcagaaatg gagattcaaa caccacgtct tctattattt tattaatcaa tctgtagaca tgtgtcccca ctgcaggag tgaactgctc caaggagaa acttctggga gcctccaaac tctagctgt ctcatcctt gcctggaga gacggcagaa ccatggcatt ttatagctgc tgcgtggctc tctggcact cacctggcac acctctgctt acgggccaga ccagcgagcc caaaagaag gggacattat ccttgggggg ctctttccta ttcatttttg agtagcagct aaagtcaag atctcaaatc aaggccggag tctgtggaat gtatcaggta taatttccgt ggggttcgct ggttacaggc tatgatat gccatagagg agataaacag cagcccagcc cttcttccca acttgacgt ggatacagg atatttgaca cttgcaacac cgtttcttaag gccttggag ccacctgag tttgttgct caaaacaaa ttgattcttt gaaccttgat gattctgca actgctcaga gcacattccc</p>	Homo sapiens

tctacgattg ctgtggtggg agcaactggc tcaggcgtct ccacggcagt ggcaaatctg
ctggggctct tctacattcc ccaggtcagt tatgcctect ccagcagact cctcagcaac
aagaatcaat tcaagtcttt cctcgaacc atccccaatg atgagcacca ggccactgcc
atggcagaca tcatcgagta ttccgctgg aactgggtgg gcacaattgc agctgatgac
gactatgggc ggccggggat tgagaaattc cgagaggaag ctgaggaag ggatatctgc
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gagccccca tcaaggagat tgtccggcgc aatatcacgg gcaagatctg gctggccagc
gagccctggg ccagctcttc cctgatcgcc atgcctcagt acttccacgt ggttgccggc
accattggat tcgctctgaa ggttgggcag atccaggct tccgggaatt cctgaagaag
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aactgccacc tccaagaagg tgcaaaaagg cctttacctg tggacacctt tctgagaggt
cacgaagaaa gtggcgacag gtttagcaac agctcgacag ccttccgacc cctctgtaca
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tcttacaatg tgtacttagc agtctactcc attgcccacg ccttgcaaga tataatatac
tgcttacctg ggagagggt cttcaccaat ggctcctgt cagacatcaa gaaagttag
gcgtggcagg tcctgaagca cctacggcat ctaaaactta caacaatat gggggagcag
gtgacctttg atgagtgtg tgacctggtg gggaactatt ccatcatcaa ctggcacctc
tccccagagg atggctccat cgtgtttaag gaagtgggt attacaaagt ctatgccaag
aaggggagaaa gactcttcat caacgaggag aaatcctgt ggagtgggtt ctcaggggag
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ggggagccca cctgctgctt tgagtgtgtg gagtgtcctg atggggagta tagtgatgag
acagatgcca gtgctgttaa caagtgccta gatgacttct ggtccaatga gaaccacacc
tctgcattg ccaaggagat cgagtttctg tcgtggacgg agccctttgg gatcgactc
acctctttg ccgtgctggg catttctctg acagcctttg tgctgggtgt gtttatcaag
ttccgcaaca caccattgt caaggccacc aaccgagagc tctcctacct cctcctcttc
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tgaaaaacca accgtgtcct cctgggtgtt gagggcaaga tccccaccag cttccaccgc
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gaggatgaga tcatcttcat cactgtccac gagggctccc tcatggccct gggtctcctg
atcggtctaca cctgcttctt ggctggccatc tgcttcttct ttgcttctca gtccgggaag
ctgcccggaga acttcaatga agccaagttc atcaccttca gcatgctcat cttctctcat
gtctggatct ccttcattcc agcctatgcc agcacctatg caagtttgt cctgcccgtta
gaggtgattg ccctcctggc agccagcttt ggcttgctgg cgtgcatctt cttcaacaag
atctacatca ttctcttcaa gccatcccg ccaaccatcg aggaggtgag ttgcagcacc
gcagctcacg ctttcaaggt ggtgccccg gccacgctgc gccgagcaa cgtctccgc
aagcgggtcca gcagccttg aggtctccag ggtatccacc cctcctctc catcagcagc
aagagcaaca gcgaagacc attccacag cccgagaggc agaagcagca gcagccgctg
gcctaacc cccaagagca gcagcagcag ccctgacc tcccacagca gcaacgatct

118	1598	Calcium-Sensing Receptor (CASR)	NP_000379.1	MAFYSCCWVL	LALTWHTSAY	GPQRAQKKG	DIILGGLFPI	HFGVAAKDQD	LKSRPESVEC	P	Homo sapiens
				IRYNFRGRW	LQAMIFAIEE	INSSPALLPN	LTLGYRIFDT	CNTVSKALEA	TLSFVAQNKI		
				DSLNLDFCN	CSEHIPSTIA	VVGATGSGVS	TAVANLLGLF	YIPQVSYASS	SRLLSNKNQF		
				KSFLRTIPND	EHQATAMADI	IEYFRWNWVG	TIAADDDYGR	PGIEKFREEA	EERDIDICDFS		
				ELISQYSDEE	EIQHVVEVIQ	NSTAKVIVVF	SSGPDLEPLI	KEIVRRNITG	KIWLASEAWA		
				SSSLIAMPQY	FHVVGGTIGF	ALKAGQIPGF	REFLKKVHPR	KSVHNGFAKE	FWEETFNCHL		
				QEGAKGPLPV	DTFLRGHEES	GDRENSSTA	FRPLCTGDEN	ISSVETPYID	YTHLRISYNV		
				YLAVYSIAHA	LQDIYTCLPG	RGLFTNGSCA	DIKKVEAWQV	LKHLRHLNFT	NNMGEQVTFD		
				ECGDLVGNYS	IINWHLSPED	GSIVFEVGY	YNVYAKKGER	LFINEEKILW	SGFSREVPPS		
				NCSRDLCLAGT	RKGIIEGPT	CCFECVBCPD	GEYSDETDAS	ACNKCDDDFW	SNENHTSCIA		
				KEIEFLSWTE	PFQIALTLFA	VLGIFLPAFV	LGVIKIFRNT	PVVKATNREL	SYLLLFSLLC		
				CFSSSLFFIG	EPQDWTCLRL	QPAFGISFVL	CISCILVKTN	RVLVFEAKI	PTSFHRKWWG		
				INLQFLLVFL	CTFMQIVICV	IWLTYAPPSS	YRNQLEDEI	IFITCHEGSL	MALGFLIGYT		
				CLLAAICFFF	AFKSRKLPEN	FNEAKFITFS	MLIFFIVWIS	FIPAYASTYG	KFVSAVEVIA		
				ILAA5FGLLA	CIFENKIYII	LFKPSRNTIE	EVRCSSTAHA	FKVAARATLR	RSNVSRKRSS		
				SLGSTGSTP	SSSISKSNS	EDFPQPERQ	KQQQPLALTO	QEQQQQPLTL	PQQQRSQQQP		
				RCKQKVIKGS	GTVTFSLSFD	EPQKNAMAHG	NSTHONSLEA	QKSSDTLTRH	QPLLPLOCGE		
				TDLDLTVQET	GLQGPVGGDQ	RPEVEDEEEL	SPALVSSSQ	SFVISGGGST	VTENVVNS		
119	1676	Formyl Peptide Receptor-Like Receptor	NM_001462	gpcacgagga	acaacctatt	tgcaaatgtg	gcgcaaacat	tctgacctga	caggaccatg	A	Homo sapiens
				gacacaggtt	gtagagatag	agatggctct	ggctgtgcat	tcagcagatt	ctgtagatag		
				aattaatagg	acttggatgg	gatttgggtg	agagaaaagt	aaatgaaaga	taagtcttag		
				tttggaagtt	ttacaactg	aatgtttaaa	ctcaaataga	cacaaaatat	tggaagagtg		
				gcaggtttgg	gaggatgaga	caatcaactg	tttgggttag	ccacgttagg	tttgaatatg		
				ctacgggata	ccgtggggag	aggttatatc	agactggagc	accagagaga	ggccaaaggct		
				gatagtttag	atgaaaagag	agcatgatata	tttaagccct	gagactggat	aatatcacct		
				atagaaaagac	tatatagaga	taagagaggt	ggggaacaag	taaaagctgc	gggacactcc		
				taaaatttaga	gtcaaatatta	gagcagaaaa	tactagcaaa	ggggactgaa	aagcgggtggc		
				caattgagct	tcaaatgcaa	gtgaaaagtgt	gttgtgtgta	catttatcat	ctcatggcac		
				aggaaaaaacg	tgatttaagg	agaaggagc	gatccaatgg	gaagaagaga	tccaatggat		
				cctctatcac	gaagatatgg	agataagaac	caatatggat	ttgcacccac	tgcatattgca		
				gccttgaggt	cataagcatc	ctcaggaaaa	tgaccagggt	gctgctggca	agatggaaac		

120	1676	Formyl Peptide Receptor- Like Receptor	NP_001453.1	caactttctcc actcctctga atgaatatga agaagtgtcc tatgagtctg ctggtctacac tggtctgcgg atcctcccat tgggtgtgct tgggttcacc ttgtcctcog gggctcctggg caatgggctt gtgactggg tggctggatt cgggatgaca cgcacagtca ccaccatctg ttacctgaac ctggccctgg ctgacttttc ttboacggcc acattaccat tectcattgt ctccatggcc atgggagaaa aatggccttt tggctgggtc ctgtgtaagt taattcacat cgtggtggac atcaacctct ttggaagtgt ctctctgatt ggtttcattg cactggaccg ctgcatttgt gtcctgcac cagtctgggc ccagaaccac cgcactgtga gtctggccat gaaggtgac gtccgacctt ggattcttgc tctagtccct accctggccag ttttccctctt tttgactaca gtaactattc caaatgggga cacatactgt actttcaact ttgcatcctg gggtggcacc cctgaggaga ggtgaaggt ggcattacc atgctgacag ccagagggat tatccggttt gtcattggct ttagcttgcc gatgtccatt gttgccatct gctatggct cattgcagcc aagatccaca aaagggtcat gattaaatcc agccgtccct tacgggtcct cactgctg gtggcttctt tcttcatctg ttgggttccc ttccaactgg ttgcccttct gggcaccgtc tggctcaaa agatgttgt ctatggcaag tacaaaaatca ttgacatcct ggttaaccca acgagctccc tggccttctt caacagctgc ctcaacccca tgctttacgt ctttgtggc caagacttcc gagagagact gatccactcc ctgcccacca gtctggagag ggccctgtct gaggactcag cccaactaa tgacacggct gccaatctg agttctgttc tgacagact gagttacagg caatgtgagg atgggggtcag ggataatttg agttctgttc atctaccct aatgccagtt ccagcttcat ctacccttga gtcataattga ggcattcaag gatgcacagc tcaagtattt attcaggaaa aatgcttttg tgcctctgat ttggggctaa gaaatagaca gtcaggctac taaaatatta gtgttttttg acttctgcct ataccctggg gtaagtggag ttgggaaaata caagaagaga aagaccagt gggatttga agacttagat gagatagcgc ataataaggg gaagacttta agtatataag taaaatgttt gctgtagggt ttttatagct attaaaaaaa atcagattat ggaagttttc tctattttt agtttgctaa gattttctg tttcttttct ttacatcatg agtggacttt gcattttatc aaatgcattt tctacatgta ttaagatggt catattattc tcttctttt atgtaaatca ttataaataa tgttcattaa gttctgaatg ttaaaactact cttgaattcc tggaataaac cacacttagt cctgattgac tttaaatatt tatatctcac aggagtgtgt tagaatttct gtgtttatgt ttatatactg ttatttcaat ttttctacta tccctgctaa gttttcatag aaaataagga acaaagagaa acttgtaatg gtctctgaaa aggaattgag aagtaattcc tctgattctg ttttctgggt ttatatctt attaaatatt cagaaaaatt c 121	1681	Follicle Stimulating Hormone Receptor	NM_000145	NP_001453.1 TICYNLALA DFSFATLPF LIVSMAMGEK WPFGWFLCKL IHIVVDINLF GSVFLIGFIA LDRCICVLHP VMAQNHRTVS LAMKVIVGPW ILALVLTLPV FLFLTVTIP NGDTYCTFNF ASWGGTPEER LKVAITMLTA RGIREFVIGF SLPMSIVAIC YGLIAAKIHK KGMIKSSRPL RVLTAVVASF FICWFFPQLV ALLGTVWLKE MLFYGKYKII DILVNPTSSL AFFNSCLNPM LYFVFGQDFR ERLIHSLEPS LERALSEDSA PTNDTAANSA SPPAETELOA M cgctgagatc tgtggagggt tttctctgca aatgcagaaa gaaatcaggt ggatggatgc A ataattatgg cctcgctcct ggtctctttg ctggcatctc tgagcttggg ctgaggtgt catcatcgga tctgtcactg ctctaacagg gtttttctct gccaagagag caaggtgaca gagattcctt ctgacctccc gaggaatgcc attgaactga ggtttgtcct caccaagctt	Homo sapiens	Homo sapiens
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122	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	<p> cagatcatcc aaaaaggtgc attttcagga ttgggggacc tggagaaaat agagatctct cagaatgatg tcttgagggt gatagaggca gatgtgttct ccaaccttcc caaattacat gaaattagaa ttgaaaaggc caacaacctg ctctacatca ccctgaggc cttccagaac cttcccaacc ttcaatatct gtaatatcc aacacaggta ttaagcacct tccagatgtt cacaagattc attctctcca aaaggtttta cttagacattc agataaacat aaacatccac acaattgaaa gaaattcttt cgtggggctg agctttgaaa gtgtgattct atggctgaat aagaatggga ttcaagaagt acacaactgt gcattcaatg gaacccaact agatgcagtg aatctaagcg ataataataa tttagaagaa ttgcctaatt atgttttcca cggagcctct ggaccagtca ttctagatat ttcaagaaca aggatccatt ccctgcctag ctatggctta gaaaatctta agaagctgag gccaggctg acttacaact taaaaagct gcctactctg gaaaagcttg tcgcccctcat ggaagccagc ctacactatc ccagccattg ctgtgccttt gcaaaactgga gacggcaaat ctctgagctt catcaattt gcaacaaatc tattttaagg caagaagtgg attatatgac tcaggctagg ggtcagagat cctctctggc agaagacaat gagtcagct acagcagagg atttgaatg acgtacactg agtttgacta tgacttatgc aatgaagtgg ttgacgtgac ctgtccctcct aagccagatg cattcaacc atgtgaagat atcatggggt acaacatcct cagagtcctg atatgtttta tcagcatcct ggccatcact gggaacatca tagtgctagt gatcctaact accagccaat ataaactcac agtccccagg ttccttatgt gcaacctggc ctttgctgat ctctgcattg gaatctacct gctgctcatt gcatcagttg atatccatc tatccacaa tatcacaact atgccattga ctggcaaaact ggggcaggct gtgagtctgc tggctttttc actgtctttg ccagtgagct gtcagttctac actctgacag ctatacctt ggaaagatgg cataccatca cgcattgccat gcagctggac tgcaaggtgc agtcocgcca tgcgtccagt gtcattggtga tgggctggat ttttgctttt gcagctgccc tctttcccat ctttggcatc agcaggtaga tgaaggtgag catctgcctg cccatggata ttgacagccc ttgttcacag ctgtatgtca tgtccctcct tgtgtctcaat gtcctggcct ttgtggtcat ctgtggctgc tatatccaca tctacctcac agtgcggaac cccaacatcg tctcctcctc tagtgacacc aggatcgcca agcgcattgg catgctcctc ttcactgact tcctctgcat ggcacctt ggcacctt tcttctttg ccatttctgc ctccctcaag gtgcccctca tcaactgtgc caagcaag atctgtctgg ttctgtttca ccccatcaac tcctgtgcca accccttct ctatgccatc ttaccacaaa actttcgag agatttcttc attctgctga gcaagtgtg ctgctatgaa atgcaagccc aaatttatag gacagaaact tcattccactg tccacaacac ccattccagg aatggccact gctcttcagc tcccagagtc accagtgggt ccacttacct actgtccct ctatgctcatt tagcccaaaa ctaaaaacaca atgtgaaaaat gtatctgagt attgaaatg attcagatcc ttgcctttga aggttatgtc acaaggagct gacagtgtt ctacacattt catctaat taaattcctg gcataccttt aaggtaaat ggtcagggaac tattaattcc atgtgatata ttaggaagct gaattattag taacaacaat aataataaa gaatgcaata ctgtaaaaa gcggccgcga att </p>	Homo sapiens
122	1681	Follicle Stimulating Hormone Receptor	NP_000136.1	<p> MALLVSLLA FLSLGGCHH RICHCSNRVF LCQESKVEI PSDLPNAIE LRFVLTCLR P IQKAFSGFG DLEKIEISQN DVLEVEADV FSNLPKLHEI RIEKANLLY ITPEAFQNL P NLQYLLISNT GIKHLPDVHK IHSLQKVLDD IQDINIHTI ERNSFVGLSF ESVILWLKN GIQEIHNC AF NGTQLDVNL SDNNLEELP NDVFHGASGP VILDISRTI HSLPSYGLEN LKKLRARSTY NLKKLPFLEK LVALMEASLT YPSHCCAFAN WRRQISELHP ICNKSILRQE </p>	

125	1762	Galanin Receptor GalR1	NM_001480	AK	QCLSLVHCCV NPVLYSFINR NYRYELMKAF IFKYSAKTGL TKLIDASRVS ETEYSALEQN	Homo sapiens
					atccccgtag aatcccgctcca gtctctgtctc gcgcaccgtg actttctaagg ggcgcggatt A	
					tcagccgagc tgtttttcgc tctcagttgc agcagagaag cccctggcac ccgactctat	
					ccaccaccag gaagcctccc aaaagagctc tcgccctgtg gacgactcgg aatccccgga	
					aaagccggga gggagtcgga ggcgcacgcc cactggggag gtggcgctgg gcgcgcggga	
					tgccggggga gccttctctg caggagcgc acagtgcact gctgcgcgt gggcagtgcg	
					gggaagcgcc gcgggaagga gcggctccga gcaacaggtg cagcacgcag ccgctccggg	
					agccagggaa aacgcgcggc gaagatctgg agcggtaagg cggagagaag ggtctttcca	
					cctgcgcggc tgcagcggc ggatccctct tcccaggctc cgtggctcgc cagcggggcg	
					aggcgcggc gcaggggacc ccagtgtctt cgagatcac gtccctccc gagaaggctc	
					agctccggc tccgaaccc accctctctc agaaggtcgc ggcgaaaaga cggcgccacc	
					aggcacggc accggatccc cgtcccgtc ggctcgcgc tgggggaag ctcagactcc	
					taaaactgca ctctccgtg tttgcgcgg gaccctggc cccccggc cctgtctatc	
					ccgcctccc tcccgcgc cccgcgcgt gcgcgggaca ccccgcggg ccatggagct	
					ggcggtcggg aacctcagc agggcaacgc gactggccg gaccccccg ccccgagcc	
					cgggcgcgtg ttgggcatcg gcgtggagaa ctctgtcac cttgtggtgt tcggcctgat	
					cttcgcgtg ggcgtgctgg gcaacagcct agtgatcac gtgctggcg gcagcaagcc	
					gggcaagccg cggagcacca ccaacctgtt cactctaac ctgagcatcg ccgacctggc	
					ctacctgctc ttctgcatcc ccttcaggc caccgtgtac gcgctgccc cctgggtgct	
					ggcgccctc atctgcaagt tcatccacta ctctctcac gtgtccatgc tggtagcat	
					cttcacctg gcgcgcatgt ccgtggaccg ctacgtggcc atcgtgcact cgcgcgcctc	
					ctcctccctc aggtgtctcc gcaacgcgt gctgggcgt ggctgcatct ggcgcgtgc	
					cattgccatg gcctgcgcg tggectacca ccagggcctc ttcaccccg gcgccagcaa	
					ccagacctc tgcgtggagc agtggccga cctcgccac aagaaggcct acgtgggtgtg	
					caccttcgtc ttgggtacc tgcgtgcgt cctgtctatc tgcctctgct atgccaaagt	
					ccttaatcac ttgcataaaa agttgaaga catgtcaaa agtctgaag catccaaaga	
					aaagactgca cagacagttc tgggtgtgtt tgtgtgttt ggaatctctt ggctgccgca	
					ccacatcac catctctggg ctgagtttgg agttttccc ctagcgcgg cttcctctct	
					cttcagaatc accgccact gcctggcgta cagcaattcc tccgtgaatc ctatcattta	
					tgcatttctc tctgaaaatt tcaggagggc ctataaaca gtgttcaagt gtcacattcg	
					caaagattca cactgagtg atactaaaga aataaaagt cgaatagaca cccaccatc	
					aaccaattgt actcatgtgt gataaaagat agagtatcct tatggttgag ttccatata	
					agtggaccag acacagaaac aaacagaatg agctagtaag cgatgctgca actgtttatc	
					ttaacaagaa ttcaagtcgt ttttaattaaa tcccacgtgt gtaaaaaagt actttgatcc	
					atttaggaaa ttcttaggtc tagtgagaat tatttttcaa ttttatttta gttctaatt	
					atgttttcaga aacaaaagac aatgctgtac agttttattc ctcttcagac atgaaaaggga	
					acatatatat tccatatata tgttcaactc ttcatagatt gtgaactggc ccatcaatat	
					ggtcagggaat atttgcatc tacattttta agccaattta tttagaaaaa aaattttgagc	
					tttaattctt taatttttaag agaagtaata ttgtgaacta tgtattttta aatatgatca	
					tggaacacaca atgatgaatt ttttgccat ttacatagac atatctatta agtggaaga	

126	1762	Galanin Receptor GalR1	NP_001471.1	aggctttctg aagtctgttt gcacaggtgg cattgtctc caattgtagc tagcgcaacg agctttggaa gcctgtcatt atgagataca gtcggtttac ctcaggagtc aattcagtg tgtactggg acctgggatg cagtagtagg cactgttgat tcaaatttat cctgtgaac tgctttata gaggtaacaa aacagagtca gagaccactg tcttaacagt ggaagatgca aataagtttt tgagaataaa actggatttt gaaattttac attagtactt gacaaaagtt ttcattttgc cttgaaatgga acctactaaa agagagatg aaaaaaatc agcgaggtg atgtagataa taatttctat gggaccataa actagacaga attcagtaag tcacatgaag taatggtcac gcctgtacat aaagcatatt tcatgtttga tttagatgac attcaaaaa aatcatggga ctgaatatata ctggggatc ctatcttgta caaatgcacg ctttttcatt aaatttgtaa tgatgtttta tgaacatttc caccaaacat tatttccctc aaaaatgta atttggggtt aaaccatca ccatttgaat ttcaaatgta gttttcatga caattttata ttgatgtgtg ttacaatga gaaaatggca tgaataatatt aaattgtctt gtatcg SKPGKPRSTT NLFILNLSIA DLAYLLFCIP FQATVYALPT WVLFALGVIG NSLIVITVLAR P VSIFTLAAMS VDRYVAIVHS RRSSIRVSR NALLGVGCIW ALSIAMASPV AYHQGLFHPR ASNQTFCEWQ WPDPRHKKAY VVCTFVFGYL LPHHIIHLWA EFGVFPLTPA SFLFRITAHK LKNSKKSEA SKKKTAAQTVL VVVVFGISW LPHHIIHLWA EFGVFPLTPA SFLFRITAHK LKNSKKSEA IIYAFLSENF RKAYKQVFKC HIRKDSHLS DTKENKSRIDT PPSTNCTHV	Homo sapiens
127	1808	Gastric Inhibitory Polypeptide Receptor	NM_000164	ggcagcgggt gcaggggctg caggagcaag tgaccaggag caggactggg gacaggcctg A atcgccctcg caggaaccag acccttcgcc gccctcaga tgactacctc tccgactctg cagctgctgc tgcgctctc actgtgcggg ctgctgtccc agaggcgga gacaggctct aaggggcaga cggcggggga gctgtaccag cgctgggaac ggtaccgcag gtagtgccag gagacctgg cagccgcgga accgccttca ggcctgcctt gtaacgggtc ctctgatag tacgtctgct gggactatgc tgcaaccaat gccactgcc gtgcgtcctg cccctggtag ctgcccggc accaccatgt ggtgcagggt ttctgtctcc gccagtgtgg cagtgtggc caatggggac ttggagaga ccatacaca tgtgagaacc cagagaagaa tgaggccttt ctggaccaaa ggtcatctt ggagcgggtt caggctcatgt acactgtcgg ctactccctg tctctcgcca cactgtgct agccctgtc atcttgagtt tgttcaggcg gctacattgc actagaaact atatccacat caactgttc agtcttttca tgttcgagc tgcggccatt ctcagccgag accgtctgct accctgacct ggccttacc ttggggacca ggccttgcg ctgtggaac aggcctcgc tgcctgccg acggccaga tctgaccca gtactgcgtg ggtgcaact acactggct gctgtggag ggcgtctacc tgcacagtct cctggtgctc gtgggaggt ccgaggagg ccactccgc tactacctg tctcggctg gggggccccc gcgcttttcg tcattccctg ggtgatcgtc aggtacctgt acgagaacac gcagtgtgg gagcgcaacg aagtcaaggc catttggtg attatacga ccccatcct catgaccatc ttgattaatt tctcatctt tctcgcatt cttggcattc tctgtccaa gctgaggaca cggcaaatgc gctgccgga ttaccggctg aggtggctc gctccacgt gacgtgggtg ccccgtctgg gtgtccacga ggtgtgtgtt gctccgtga cagaggaaca ggcctggggc gccctgcgt tcgccaagct cggctttgag atcttctca gctccttcca gggcttctg gtcagcgtcc tctactgctt catcaacaag gaggtgcagt cggagatccg ccgtggctgg caccactgcc gcctgcgcg cagcctgggc gagaggaac gccagctccc ggagcgcgcc	Homo sapiens

128	1808	Gastric Inhibitory Polypeptide Receptor	NP_000155.1	<p> ttcctggccc tgcctccgg ctccggcccg ggcgaggtcc ccaccagccg cggcttgctc tcggggaccc tccagggcc tgggaatgag gccagccggg agtgggaaag ttactgctag gggcgggat cccgtgtct gtccagttag catggattta ttgagtcca actcgctgcc agggccagta cggaggacgc tggggaatg gtgaaggaaa cagaaaaag gtccctgcc ttctggagat gacaactgag tggggaatc agaccgtgaa cacaatacat caagtccac acacgtatg gaatggttat gaagggaagc gagaaggggg cctagggttg tctgggagc gtctccaaag agtgacact taagccatcc ccgaaagagc tgaagagat cactttggg agagctggag aacaggattc taggcggaag cgatagcata ggcgaaggcc ctgggacag aaggcgctca gcctggctg gagtagaatt aagtcagagc caacagggtg gggagagaca gagaagtggg caggggcacc caagttggga ttctatttca ggtgcattgg agattcttag gagtgtctct tgggggtaat attttattt ttaaaaaatg aggat MTTSPILQLL LRLSLCGLLL QRAETGSKGQ TAGELYQRWE RYRRCQETL AAAPPSGLA P CNGSFDMYC WDYAAPNATA RASCPWYLPW HHVAAAGFVL RQGSDDQWG LWRDHTQCEN PEKNEAFDQ RLILRLQVM YTVGYSLSLA TLLALLLS LFRLHCTRN YIHINLFTSF MLRAAAILSR DRLLPRPGPY LGDQALALWN QALAACRTAQ IVTQYCVGAN YTWLLVEGVY LHSLLVVG SEEGHFRYLL LLGWGAPALF VIPWVIVRYL YENTQWERN EVKAIWIIIR TPILMTILIN FLIFIRILGI LLSKLRTROM RCRDYRLRLA RSTLTLPVLL GVHEVVFAPV TEEQARGALR FAKLGFEIFL SSFGFLVSV LYCFINKEVQ SEIRRGWHHC RLRRSLGEEQ RQLPERAFRA LPSGSGPGEV PTERGLSSGT LPGPNEASR ELESYC </p>	Homo sapiens
129	1813	Gastrin- Releasing Peptide Receptor	NM_005314	<p> ccagattcta aatatcagga aagacgcgtg gggaaaaatag caggccaaaa gtcttagta A aactgcagcc agggagactc agactagaat ggaggtagaa agaactgatg cagagtgggt ttaattctaa gccttttgtt ggctaagttt tgtgtgtgtt aacttattga atttagagtt gtattgcact ggtcatgtga aagccagagc agcaccagtg tcaaaatagt gacagagagt ttggaatacc atagttagta tatatgtact cagagtattt ttattaaaga aggcgaagag ccggcatag atcttatctt catcttact cggttgcaaa atcaatagtt aagaaatagc atctaaggga acttttaggt gggaaaaaa atctagagat ggcctctaat gactgtttcc ttctgaactt ggagtgagc catttcagc actgcaacat ctccagtcac agtgcggatc tccccgtgaa cgatgactgg tcccaccgg ggatcctcta tgtcatcctt gcagtttatg gggttatcat tctgataggc ctcatggca acatcacctt gatcaagatc ttctgtacag tcaagtccat gcgaacgtt ccaaacctgt tcatttccag tctggctttg ggagacctgc tcctcctaata acgtgtgtc ccagtggatg ccagcaggta cctggctgac agatggctat ttggcaggat tggctgcaaa ctgatcccc ttatacagct tacctctgtt ggggtgtctg tcttcacact cagggcgctc tcggcagaca gatacaaaag cattgtcgg ccaatggata tccaggcctc ccattgccctg atgaagatct gactcaaaag cgctttatc tggatcatct ccattgtgct ggccattcca gagggcgtgt ttctgacct ccatcccttc catgaggaaa gcaccaacca gaccttcat agctgtgccc cataccaca ctctaagtag ctccaccca aaatccattc tatggcttcc ttctgtgtct tctacgtcat ccactgtcg atcatctctg ttactacta ctctattgct aaaaatctga tccagagtgc ttacaatctt cccgtggaag ggaatataca tgtcaagaag cagattgaat ccgggaagc acttgccaag acagtgtcg tgtttgtggg cctgttcgct ttctgtggc tcccaatca tgtcatctac ctgtaccgct cctaccacta ctctgaggtg gacacctcca tgtccactt tgtccacagc atctgtgccc </p>	Homo sapiens

130	1813	Gastrin- Releasing Peptide Receptor	NP_005305.1	<p> MALNDCCFLN LEVDHFHCHN ISSHSADLPV NDDWSHPGIL YVIPAVYGV ILLIGLIGNIT P LIKIFCTVKS MRNVNLFIS SLALGDLILL ITCAPVDASR YLADRWLFGR IGCKLIPFIQ LTSVGVSFT LTALSADRYK AIVREMDIQA SHALMKICLK AAFIWIISML LAIPEAVFSD LHPFHEESTN QTFISCAPY HSNEHPKIH SMASFLVFYV IPLSIISVY YFIAKNLIQS AYNLPVEGNI HVKKQIESRK RLAKTVLVFV GLFAFCWLPN HVIYLYRSYH YSEVDTSMHLH FVTSICARLL AFTNSCVNPF ALYLLSKSFR KQFNTQLLCC QPGLIIRSHS TGRSTTCMTS LKSTNPSVAT FSLINGNICH ERYV </p>	Homo sapiens
131	1814	Cholecystoki nin B Receptor	NM_000731	<p> atggagctgc tcaagctgaa cggagcgtg cagggaaacg gacccgggcc gggggcttcc A ctgtgcgcc cggggcgcc tctctcaac agcagcagt tgggcaacct cagctgcgag ccccctgca ttcccgagc cgggacacga gaattggagc tggccattag aatcactctt tacgcagtga tctctctgat gagegttggg ggaatatgct tcatcatcgt ggtcctggga ctgagccgcc gctgaggac tgtaccaat gcctctctcc tctcactggc agtcagcgac ctctgctgg cgtggcttg caagcggtt tctacacctc accctctgc ccaatctcat gggcacattc atctttggca cgtcatctg catcgactg gagcggtaca gcgccatctg cgcaccactg tccacgctaa gcctcgtggc cgtgctccac gcgctccac gcgctcgcg cagtggtctg caggcacgag tgtggcagac gcctccccc gcctacccc gtgtacactg tctgtgcaac agtggggcct ctgtccggac tactcatggt gcctacccc tcgctggccc agtgcgcggg tccgcccagc ctggtccgta cgtgtgctgc agtgcgtgca tcgctggccc cttcatcccc ggtgtggtta tggccgtggc ctacgggctt ctgctgcttc tgccttctgt cttcatcccc agggctctgc tttgacggcg acagtgcag cgacagccaa atctctcgcg agctctactt agggctctgc tttgacggcg acagtgcag cgacagccaa agcagggtcc gaaaccaagg cgggctgcca ggggctgttc accagaaagg gcgttgccgg cctgagactg gcgcggttgg cgaagacagc gatggctgct acgtgcaact tccacgttcc cggcctgccc tggagctgac ggcgctgac gctccaggcg cgggatccgg ctcccggccc accaggcca agctgctggc taagaagcgc gtggtgcgaa tgtgtctggt gatcgttgtg cttttttttc tgtgttgggt gccagtttat agtgccaaca cgtggcgcg ctttgatggc ccgggtgcac accgagcact ctcgggtgct cctatctctt tcatcactt gctgagctac gcctggcct gtgtcaacc cctggtctac tgcctcatgc accgtcgctt tcgccaggcc tgcctggaaa ctgtcgctcg ctgctgccc cggcctccac gagctcgccc cagggtctctt ccgatgagg accctccac tccctccatt gcttcgctgt ccaggcttag ctacaccac atcagcacac tgggcccctgg ctgaggagta gaggggcccgt gggggtttag gcagggcaaa tgacatgcac tgaccttcc agacatagaa aacacaaacc acaactgaca caggaacaca acacccaaag catggactaa ccccaacgac aggaagaggt agcttacctg acacaagagg aataagaatg gagcagtaca tgggaaagga ggcagcctc tgatatgga ctgagcctgg cccatagaaa catgacactg acctggaga gacacagcgt ccctagcagt gaactatttc </p>	Homo sapiens

132	1814	Cholecystokini nin B Receptor	NP_000722.1	<p> tatacagtggaagggctgacctgcctctcaacacacatagataatgggcaac tgattgttttagagactatggagctggcagactgactctgtagtttg acctacagtgaccttcccatacagcaatgaaataaccaagggcctaa ctgaccaaagagctgttctgactgaaaaggttcttcaccccttccagt ggccctgcccctctcttcttcccaactgttcaagaaataataaattgt cctgaaaaaataaaaaaaataaaaaaaaggaattcc MELLKLNRSVQGTGPGPGASLCRPGAPLINSSSVGNLSCEPPRIGAGTR ELELAIRITL P YAVIFMSVGGMNLIIVLGLSRRLRTVTN AFLLSLAVSD LLLAVACMPF TLLPNLMGTF IFGTVICAVSYLMGVSVSVSTLSLVAIAL ERYSAICRPL QARVWQTRSH AARVIVATWL LSGLLMVPYPVTVVQPVGP RVLCQVHRWPSARVRQTWSV LLLLLFFIP GVMAVAYGL ISRELYLGLRFDGSDSDSQSRVRNQGLP GAVHQNGRCR PETGAVGDS DGCYVQLPRS RPALELTALTAPGPGSGSRPTQAKLLAKKR VVRMLLVIV LFFLCWLPVY SANTWRAFDG PGAHRAALSGAPISFIHLISYASACVNPLVY CFMHRFRQA CLETCARCCP RPPRARPRAL PDEDPTPSIASLSRLSYTTISTLGGP ggatctggcagcgccgcaagcagagcgtcacggcgcccgaccggagc gcgcccagggagcagcccgagcagcccgagcagcccgagcagcccg gcagcttcagggagggacacccactggccaccaggactgcattgcccc gtgtgcagcc cctgccagatgtggaggcaactagctgcccagaggcatgccccctgccc agccactgctgtgtgctgctgagcagccacaggtccccctcccgctcaggt gatggacttcctgtttgagaagtggaaagctctacggtagccaggtgtcacc acaacctgag cctgctgccccttcccacaggagtggtggtgcaacagaaacttctgctg cctctctgcaacatctctgcccctgctgctgcaacatctctgcccctggtacc tgccctggca ccacaaagtgcaacacgcttctgtgttcaagagatgcggcagcgtcagtgggtgcg tggaaccccgggcagccttgccgtgagcctcccagtgccagatggatg gcgaggagat ctacagcctgtccctggggccctgctgctcccaagatgacagcagcttc caggtgatgtacacagtggg gctgcactgcaccgcaatgcatccacgcgaatctgttgcgtccttcgtgctgaaagc cagctccgtgctggtcattgatgggctgctcaggaccgcacagccaga aaattggcga cgacctcagtgacagcacctggctcagtgaaggagcgtgctggtgccc gtgtggccgc ggtgttcattgcaatatggcatactggtgcaactactgctggtggtggtggtggtg agggcctgta cctgcacaaactgctggtggccctggccacctccccgagaggcttcttca gcctctacct gggcatcggctgggtgcccctatgctgttgcgtcgtcccctgagctgg tcaagtgtct gttcgagaacgtccagtgctggaccagcaactcttctcattctgctggtt ggatcctgctg gttccccgtcttctggtgccaactctgatacactcttcacccgca tcgttcagct gctcgtggccaaagtgcgggcacggcagatgcaccacacagactacaagt tccggctggc caagtcacgctgacctcaacctctgctggcgctccacgaagtgggtct ttgccttcgt gacggacgagcacgcccaggacacctggtggtggtgctctctcttcg acctcttct cagctccttcaggggcctgctggtggtggtgctctctactgcttctcaaca aggaggtgca gtcggagctgcggcggtggtggacacgctggcctgggcgaagtgtctat gggagggagc gaacaccagcaaccagggcctctctcctcctggtgcccggccac ggccctccccgcaaggagct </p>	Homo sapiens
133	1834	Glucagon Receptor	NM_000160	<p> ggatctggcagcgccgcaagcagagcgtcacggcgcccgaccggagc gcgcccagggagcagcccgagcagcccgagcagcccgagcagcccg gcagcttcagggagggacacccactggccaccaggactgcattgcccc gtgtgcagcc cctgccagatgtggaggcaactagctgcccagaggcatgccccctgccc agccactgctgtgtgctgctgagcagccacaggtccccctcccgctcaggt gatggacttcctgtttgagaagtggaaagctctacggtagccaggtgtcacc acaacctgag cctgctgccccttcccacaggagtggtggtgcaacagaaacttctgctg cctctctgcaacatctctgcccctgctgctgcaacatctctgcccctggtacc tgccctggca ccacaaagtgcaacacgcttctgtgttcaagagatgcggcagcgtcagtgggtgcg tggaaccccgggcagccttgccgtgagcctcccagtgccagatggatg gcgaggagat ctacagcctgtccctggggccctgctgctcccaagatgacagcagcttc caggtgatgtacacagtggg gctgcactgcaccgcaatgcatccacgcgaatctgttgcgtccttcgtgctgaaagc cagctccgtgctggtcattgatgggctgctcaggaccgcacagccaga aaattggcga cgacctcagtgacagcacctggctcagtgaaggagcgtgctggtgccc gtgtggccgc ggtgttcattgcaatatggcatactggtgcaactactgctggtggtggtggtggtg agggcctgta cctgcacaaactgctggtggccctggccacctccccgagaggcttcttca gcctctacct gggcatcggctgggtgcccctatgctgttgcgtcgtcccctgagctgg tcaagtgtct gttcgagaacgtccagtgctggaccagcaactcttctcattctgctggtt ggatcctgctg gttccccgtcttctggtgccaactctgatacactcttcacccgca tcgttcagct gctcgtggccaaagtgcgggcacggcagatgcaccacacagactacaagt tccggctggc caagtcacgctgacctcaacctctgctggcgctccacgaagtgggtct ttgccttcgt gacggacgagcacgcccaggacacctggtggtggtgctctctcttcg acctcttct cagctccttcaggggcctgctggtggtggtgctctctactgcttctcaaca aggaggtgca gtcggagctgcggcggtggtggacacgctggcctgggcgaagtgtctat gggagggagc gaacaccagcaaccagggcctctctcctcctggtgcccggccac ggccctccccgcaaggagct </p>	Homo sapiens

134	1834	Glucagon Receptor	NP_000151.1	<p> MPPCQQRPL LLLLLLACQ PQVPSAQVMD FLFEKWKLYG DQCHNLSLL PPPTLVNCR P TFDKYSCWPD TPANTTANIS CPWYLPWHK VQHRFEVKRC GPDGQWVRGP RGQWRDASQ QMDGEEIEV QKEVAKMYSS FQVMTVGYS LSLGALLAL AILGLSKLH CTRNAIHANL FASFVKASS VLVIDGLLRT RYSQKIGDDL SVSTWLSGGA VAGCRVAADF MQYGIVANYC WLLVEGLYLH NLGLATLPE RSFFSLYLG I GWGAPMLFV PWAUVKCLFE NVQCWTSNDN MGFWWILRFP VFLAILINFF IFVRIVQLIV AKLRARQMHH TDYKFRILAKS TLTLLPLLV HEWFAFVTD EHAQGTLSA KLFFDLFSS FGLLVAVLY CFLNKEVQSE LRRRWHRWRL GKVLWEERN SNHRASSPG HGPPSKELQF GRGGSQDSS AETPLAGGLP RLAESEF </p>	Homo sapiens
135	1925	Gonadotropin -Releasing Hormone Receptor	NM_000406	<p> gcagtttggg aggggtggtg gcagccagga ttcatctgag gagaccccc ttgctggtgg ctccctaga ttggtgaga gcccttctg aacctgctg ggacccagc taggctgga ctctggacc cagagcgct gctggacaac ccagaactgg acgcccagct gaggtgggg gcgggggagc caacagcagc cccacctac ccccccccc cagtgtggct gtctgcgaga ttgggctctc tctccctgca cctgcttctg cctgggtgca gaggtgagca gagagtgcca ggcggggagt gggggtggtg ccgtgaactg cgtgccagtg tccccagta tctcggaagc tccatgtgc atggaaatgt cctccaacaa taaagagctc aagtgtcac cgtg atatttagat aattataaaa accaaggcaa taattataaa actgattaac cgtttactc taacttaagc atggttgga tcagtaagat tgattaataa attgaatgc agtcagttgg attgattcta attaaagt ttaattgtt gtagaataat ttaagtga tataattgtc cagtggtcga gtgtcaaca gtgtgtttga aaaggaaac aaagaatgtt ttgagaatgt gttaattcct taagacaatg gattttaatt ggtctgttg tttcatttt tcttcattat cattatacat ctgtatgttg gacagaacac taacactaaa tagtttttag aaagtgtttt ttgaagttaa ttaaatcata atatcatgac tgacttttga attcaaat aggctgtgac tacccttctt cacttaggaa gagtggtgtg aaagccagac catctgtga ggtgctacag ttacatgtgg cctcagaat gcgtttggcc tgctctgttt tagcaactctg ttggattacc </p>	Homo sapiens

136	1925	Gonadotropin NP_000397.1 -Releasing Hormone Receptor	aatacacaaa acaagttaac ctttgatctt tcacattaag tatctcaggg acaaaatttg acatacgtct aaacctgtga cgttccatc taaagaaggc agaaataaaa catggacttt agattcgggt acaataaaat atcagatgca ccagagacac aaggcttgaa gctctgtcct gggaaaaat ggcaaacagt gcctcctctg aacagaatca aaatcacagt tcagccatca acaacagcat ccactgatg cagggaaccc tcccactct gacctgtctt ggaagatccc gagtgcgggt tactttcttc ctttttctgc tctctcgac ctttaagtct tctttcttgt tgaaccttca gaagtggaca cagaagaaaag agaaaggga aaagctctca agaataaagc tgctcttaaa acatctgacc ttaggcaacc ttgttgagac tctgattgtc atgccactgg atgggatgtg gaacattaca gtccaatggt atgctggaga gttactctgc aaagtctca gttatctaaa gcttttctcc atgtatgccc cagccttcac gatggtggtg atcagcctgg accgctccct ggctatcacg aggcccttag ctttgaaaag caacagcaaa gtcgacacagt ccatgggttg cctggcctgg atcctcagta gtgtctttgc aggaccacag ttatacatct tcaggatgat tcatctagca gacagctctg gacagacaaa agtttctct caatgtgtaa cacactgcag tttttcaca ttgtggcacc aagcatttta taacttttt accttcagct gcctcttcat catccctctt ttcatcatgc tgatctgcaa tgcaaaaatc atcttcaccc tgacacgggt ccttcacatcag gacccccacg aactacaact gaatcagtc aagaacaata taccagagc acggctgaag actctaaaaa tgacgggtgc attgcccact tcatttactg tctgctggac tccctactat gtccataggaa ttgtgtattg gttgatcctt gaaatgtaa acaggtgtgc agaccacgta aatcacttct tctttctctt tgccctttta aaccatgct ttgatccact tatctatgga tattttctc tgtga	VFLEFLLSA TFNASFLKL P TLISGKIRVT TLIVMPLDGM WNITVQMYAG ELLCKVLSYL SNKVGQSMV GLAWILSSVF AGPOLYIFRM YNPFTFSCLF IIPLEFMILIC NAKIIFTLIR TPYYVLGIWY WFDPEMLNRL	Homo sapiens
137	1945	Opsin, NM_000513 green- sensitive	atggcccagc agtggagcct ccaaaggctc gcaggccgc atccgcagga cagctatgag A gacagcacc agtcacagcat cttcacctac accaacagca actccaccag aggcccttc gaaggccga attaccacat cgtcccca gcttttcaca aatgggcttg tgctggcgc caccatgaag atctttgtgg tcaatgcac cgttttcaca aatgggcttg atcctggta accctggcgt cgctgacctg ttcaagaagc tgcgccacc gctgaactgg cactatcagc gttgtgaacc aggtctatgg ctactcgtg gcagagaccg tcatcgccag cactatcagc cctggagggc tacaccgtct cctgtgtgg gatcacaggt ctgggccacc ctatgtgtgt cctggagggc agatggatgg ttggtctgcaa gccctttggc ctctggtctc tggccatcat ttcctgggag gtgggcattg ccttctctg gatctgggct aatgtgagat ttgatgcaa gctggccatc catctttggt tggagcaggt actggccca cggcctgaag gctgtgtgga cagccccgc catctttggt tggagcaggt agctcgtacc ccggggtgca gtctacatg acttcatgcg gccagacgt gttcagcggc cactatcacc cactcagca tcatcgtgct ctgtaccc attgtcctca tggtaacctg ctgcaccc agcggtggca aagagctcga atccaccag caagtgtggc tggccatccg agcggtggc gcgcatgggt gtggtgatgg tctgtgcat ctgtctgc aaggcagaga aggaagtgc gcgcatgggt gtggtgatgg tctgtgcat tctgtctgc tggggacat acgccttctt cgcattgctt gctgctgca accctggcta ccccttccac	atccgcagga actccaccag tgctggatg tgctggcgc caccatgaag cgctgacctg gatcacaggt gccctttggc gatctgggct cggcctgaag gtctacatg ctgtaccc atccaccag tctgtgcat cccccttccac	Homo sapiens

138	1945	Opsin, green- sensitive	NP_000504.1	<p> cctttgatgg ctgccctgcc ggcttctttt gccaaaagt gccatatcta caaccccggt atctatgtct ttatgaaccg gcagtttcca aactgcactc tgcagctttt cggaagaag gttgacgatg gctctgaact ctccagcgcc tccaaaacgg aggtctcatc tgtgtcctcg gtatgcctg catga </p> <p> MAQQWSLQRL AGRHPQDSYE DSTQSSIFTY TNSNSTRGPF EGPYHIAPR WYHLLTSVWM P IFVVIASVFT NGLVLAATMK FKKLRHPLNW ILVNLAVALD AETVIASITIS VMQVYGFV LGHPMCVLEG YTVSLCGITG LWSLAIISWE RMMVVCCKPFG NVREDAKLAI VGIAFSWIWA AWTAPPPIFG WSRYPHGLK TSCGPDVFSG SSYPGVQSYM IVLMVTCCIT PLSIIVLCYL QVWLAIKRAVA KQKSESTQ KAEKEVTRMV VMVLAFCFC WGPYAFFACF AAANPGYPFH PLMAALPAFF AKSATIYNPV IYVFMNRQFR NCILQLFGKK VDDGSELSSA SKTEVSSVSS VSPA </p>	Homo sapiens
139	1951	Growth Hormone Secretagogue Receptor	NM_004122	<p> atgttgaacg cgacgcccag cgaagagcgg ggttccaacc tcacactggc cgacctggac A tgggatgctt ccccggaacg cgactcgctg ggcgacgagc tgcctgcagct ctcccccgcg ccgctgctgg cggcggtcac agccacctgc gtggcactct tgcgtgtggg tategctggc aacctgctca ccatgctggt ggtgtcgcg tcccgcgagc tgcgcaccac caccaaacctc tacctgtcca gcatggcctt ctccgatctg ctcatcttcc tctgatgcc cctggacctc gttcgcctct ggcagtaccg gccctggaac ttccggcgacc tctctgcaa actcttccaa ttcgtcagtg agagctgcac ctacgccacg gtgctcacc tccacagcgt ggcgtcgag cgctacttcg ccatctgctt cccactccgg gccaaagtggt tggtcaccaa gggcggggtg aagctgggtca tctctgctcat ctggggcctg gcctcttgca gcgcggggc catctctctg ctagtcgggg tggagcacga gaacggcacc gaccttggg acaccaacga gtcccgcccc accgagtctt cgttgcgtc tggactgctc acggtcgtc tgcgtgtgtc cagcatcttc ttcttcttc ctgtctcttg tctacgggtc ctctacagtc tcatcgcgag gaagctgtgg cggagggagg cggcgcatgc tgcgtgggtt gcctcgctca gggaccagaa ccacaagcaa accgtgaaaa tgcgtgggtgg gtctcagcgc gcgctcaggc tttctctcgc ggtctctatc ctctccctgt gccctctccc ttctctctga </p> <p> MWNATPSEEP GENLTADLD WDASPGNDSL GDELLQLFPA PLLAGVTATC VALFVVGIAG P NLLTMLVSR FRELPTTNL YLSSMAFSDL LIFLCMPDL VRLWQYRPWN FGDLLCKLFQ FVSECTYAT VLTITALSVE RYFAICFPLR AKVWTKGRV KLVIFVIWAV AFCAGPIFV LVGVEHENG DPWDNECRP TEFAVRSGLL TMVWVSSIF FFLPVFCLTV LYSLIGRKLW RRRGDAVVG ASLRQNHKQ TVKMLGGSQR ALRLSAGPI LSLCLLPSL </p>	Homo sapiens
141	1954	Growth Hormone- Releasing Hormone Receptor	NM_000823	<p> agcagccaag gcttactgag gctggtggag ggagccactg ctgggctcac catggaccgc A cggatgtggg gggccacagt ctctgcgtg ttgagcccggt taccgacctg attgggccac atgcacccag aatgtgactt catcacccag ctgagagagg atgagagtgc ctgtctacaa gcagcagagg agatgcccac caccacctg ggctgcccct cgacctggga tgggctgctg tgctggccaa cggcaggctc tggcgagtgg gtcacctcc cctgcccga tttcttctct cacttcagct cagagtccag gctgtgaaa cgggattgta ctatcactgg ctggctcgag ccctttccac cttacctgt gccctgccct gtgcctctgg agctgctggc tgaggaggaa tcttacttct ccacagtga gattatctac accgtgggcc atagcatctc tattgtagcc ctcttcgtgg ccatcaccat cctgggtgct ctccaggagg tccactgcc ccggaactac gtccacaccc agctgttcac cactttatc ctcaaggcgg gacgtgtgtt cctgaaggat </p>	Homo sapiens

142	1954	Growth Hormone-Releasing Hormone Receptor	NP_000814.1	MDRRMWGAHV FCVLSPLPTV LGHMPECDF ITQLREDESA CLQAAEEMPN TTLGCPATWD P GLLCWPTAGS GEWTLPCPD FFSHFSESG AVKRDCITIG WSEPFPPYPV ACPVPLELLA EESYFSTVK IITYVGHIS IVALFVAITI LVALRRLHCP RNYVHTQLFT TFIKAGRVE LKDAALFSD DTDHCSFSTV LCKVSVAAASH FATMNFNSWL LAEAVYLNCL LASTSPSSRR AFWWLVLAGW GLPVLFTGTW VSKLAFEDI ACWDLDDTSP YWIIKGPV LSVGVNFGLF LNIIIRILVRK LEPAQGSLSHT QSQYWRLSKS TLFILPLFGI HYIIFNPLD NAGLGIRLPL ELGLGSFQGF IVAILYCFIN QEVRTEISRK WHGHDPELLP AWRTRAKWTT PPSRAAKVLT SMC	gctgcccttt tccacagcga cgacactgac cactgcagct tctccactgt tctatgcaag gtctctgtgg cgcctcccca ttctgccacc atgaccaact ttagctggct gttggcagaa gctgtctacc tgaactgcct cctggcctcc acctcccca gctcaaggag agccttctgg tggctggttc tgcctggctg gggcctgcc gtgctcttca ctggcacgtg ggtgagctgc aaactggcct tgcaggacat cgcgtgctgg gacctggacg acactcccc ctactgggtg atcatcaag ggcctattgt cctctcgtc ggggtgaact ttgggtttt tctcaatatt atccgcacc tggtagggaa actggagcca gctcaggga gctccatac ccagttctcag tattggcgtc tctccaagtc gacactttc ctgataccac tctttggaat tcactacatc atcttcaact tctgccaga caatgctggc ctgggcatcc gctccccct ggagctggga ctgggttctt tccagggtt cattgttggc atctctact gcttctcaa ccaagaggtg aggactgaga tctcacggaa gtggcatggc catgacctg agcttctgcc agcctggagg acctgtgcta agtgaccac gcttccgc tcggcggaac aggtgctgac atctatgtc taggtgcct catcagcca ctggagtcca cacttgaatt tgggcagcta ccacgggtct gccatgctct ggaggagcaa gggggccaca tccccaccc agctgttacc cagccccggg caggtgcagc ccttctccc tgtctctgca tctgactctc ttttgaggtc cctgtatgtc taccttgac ttctgtgtc cctctgtgc tgctctcatc cattctctt actggggcct ggggctctag cccaaggctc agaggagcca ataaacctgt aaatgaaaa aaaaaa NP_000814.1	Homo sapiens
143	2120	Histamine H1 Receptor	NM_000861	caggagagaca tacaggattt aagaagccca tcatggagaa gaccttcaat tacagagata A aaaagtthtt ctgttggaac aggttaacac tagatggcag ataacagact gaggagtgag ctgcttctga ctgattaaa agggagtgga gccataactg gggcctgctc ttctgccaat gagcctccc aattctctt gctctttaga agacaagatg tgtgaggga acaagaccac tatggccagc cccagctga tggccctggt ggtggtcctg agcactatct gcttggtcac agtagggctc aacctgctgg tctgtatgc cgtacaggag gagcggagc tccacactgt ggggaacctg tacatcgtca gcctctcgtt ggcggacttg atcgtgggtg ccgtcgtcat gcctatgaac atcctctacc tgcctatgc caagtggta cttggccgtc ctctctgcct cttttggtt tccatggact atgtggccag cacagcgtcc attttcagtg tcttctatct gtgcattgat cgtacagct ctgtccagca gcccctcagg taccttaagt atcgtaccaa gaccagacc tggccacca ttctggggc ctggtttctc tcttttctgt gggttattcc cattctaggc tggaaactc tcatgcagca gacctcgtg cgccgagagg acaagtgtga gacagactc tatgatgtca cctgggtcaa ggtcatgact gccatcata acttctacct gccacactg ctcatgctt ggttctatgc caagatctac aaggccgtac gacaacactg ccagcacgg gagtcatca ataggctcct ccttctctc tcagaaatta agctgaggcc agagaacccc aagggggatg ccaagaaacc aggaaggag tctcctctggg aggttctgaa	Homo sapiens	

aaggaagcca aaagatgctg gtggtggatc tgttgtgaag tcacatccc aaaccccaa
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atgtccaaça aggaatatga ggacgaaggc ctgtgtgttg ccaggcaggc acctgggctt
tctggaatcc aaaccacagt cttaggggct tggtagtttg gaaagtctt aggcaccata
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ctttaacccc aaatttccct tggctattaa aaaagtgggt gcaaaaggca tcccaaaaag
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cagaatgcca tatttttgag ggcgtacta ggttatctc atttaagccc caaacaccc
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tttgtgttc ctctttgcat gatctgtcaa agtgagatat tttacctgc ctaaaaatag

144	2120	Histamine H1 Receptor	NP_000852.1	MSLPNSSCLL EDKMEGNKT TMASPOLMPL VGNLYIVSLV VADLIVGAW MPMNLYLIM LCIDRYRSVQ QPLRYLKYRT KTRASATILG ETDFYDVTWF KVMTALINFY LPTLLMLWFY PENPKGDAKK PGKESPWEVL KRPKPDAGG YCFPLDIVHM QAAEGSSRD YVAVNRSHGQ TDSDTTETA PGKGKLRSGS NTGLDYIKFT MAAFILCWIP YFIFENVIAT CNCCNEHLH RILHIRS	TVGLNLVLVY AVRSERKLHT P SKWSLGRPLC LFWLSNDYVA STASIFSVEI AWFLSFLWVI PQHRELINRS LPSFSEIKLR KEMKSPVVFES QEDDREVDKL HGASEISEDO MLGDSQSFSR YVSGLHMNRE RKAAKQLGFI STLNPLIYPL CNENFKKTFK	Homo sapiens
145	2121	Histamine H2 Receptor	NM_022304	ctctgcccct ccactgactc cagagaggga gatccccagt tgggagcagg caccagctat ggagagggat acagctgcgt atgacaccaa agcacccgcc agacagtgcc tcggattctc gacctacccc agccccggga ggaagctagc tcttcagggg tgatccatga acctggcttc gaggccttgc tttctctct caacacctta gaagtgttg ctttaatttat tctagaaaa gaagccttcc ccacccctg gccaaaaaaa aaaactggac tctgttggga gcttgagtc cagtgttgg catagttgtc gcaaccaggg gccctgatca ggggactgag ccgtagatgc acagcctctt ccttttgcct ggactctacc gcatgcaaga gcggtcctca tcctcatcac cgttgctggc aatgtggtcg aaccgccggc tccgcaacct gaccaattgt ttcacgtgt ctcctcggcc tctgtgtgct gcccttctct gccatctacc tttggcaagg tcttctgcaa tatctacacc agcctggatg attcttaacc tcttcatgat cagcctcgac cgggtactgcg taccctgtgc tggtcacccc agttcgggtc gccatctctc tccattaccc tgtcctttct gtctatccac ctgggggtga aagggcaatc ataccacctc taagtggaaa gtccaggtga gatgggctgg tcaccttcta cctcccgcta ctgatcatgt ttcaaggctc cccgggatca ggccaagagg atcaatcaca accatcaggg agcaaaaaag cacagtga caatgggggc tgctggtttc cctacttcac cgcgtttgtg taccgtgggc aatgaggtgt tagaagccat cgttctgtgg ctgggctatg atcctgtatg ctgcgctgaa cagagacttc accaacgggt	atcactgact atcagcaga ccatcctgc tgcaaaacct gggaaagcga gactggagt tattcattca gtcagtcatt acattttgga cagagaagaa accaatggc cgtggtcct cgtgggcttg cactgacctg caagtggagc cacagcctcc ccactgcgg ttgggtcatc cgagaccagc cgggctgggtg ctaccgcac gaaggcagcc cttcatcatc tgatgccatc cctgaacccc cttctgtgc	Homo sapiens

146	2121	Histamine H2 Receptor	NP_071640.1	aggctggcca accgcaactc ccacaaaact tctctgaggt ccaacgcctc tcagctgtcc aggacccaaa gccgagaacc caggcaacag gaagagaac ccctgaagct ccaggtgtgg agtgggacag aagtcacggc cccccaggga gccacagaca ggtaatagcc cttagccattg gtgcacagga tgggggcaat gggaggggat gctactgatg ggaatgatta agggagctgc tgtttaggtg gtgctggttt atgttctagg aactctcat gagcactttg taaacacct cttgcttaat cctcccaacg gcccccaag gtagaacta gctccctttt aaaaaggagca cattaaaatt ctgagaggac ttggcaaggg ccgcacagct ggggcat MAPNGTASSF CLDSTACKIT ITVVLAVLIL ITVAGNVVVC LAVGLNRRRL NLNCFIVSL P AITDLLGLL VLPFSAIYQL SCWSEFGKVF CNIYTSLDVM LCTASILNLF MISLDRYCAV MDPLRYPVLV TPRVAISLV LIWVISITLS FLSIHLGWS RNETSNGNHT TSKCKVQVNE VYGLVDGLVT FYLPLLIMCI TYRIFKVAR DQAKRINHIS SWKAATIREH KATVTLAAM GAFIICWEPY FTAIFYRGLR GDDAINEVLE AIVMLGYAN SALNPILYAA LNRDFTGYQ QLFCCRLANR NSHKTSLRSN ASQLSRTQSR EPRQKEKPL KIQWWSGTEV TAPQATDR tgcagcactc accatggaat ccccgattca gatcttcgc ggggagcctg gccctacctg A cgccccgagc gctgcctgc cccccacag cagcgccctgg ttccccggct gggccgagcc cgacagcaac ggcagcgccg gctcggagga cgcgagctg gagcccgcg acatctcccc ggccatcccg gtcacatca cgcggtcta ctcgtagtg ttcgctggtg gcttgggtgg caactcgtg gtcatgttcg tgatcatccg atacacaaag atgaagacag caaccaacat ttacatattt aacctggctt tggcagatgc tttagttact acaaccatgc ccttcagag tacgggtctac ttgatgaatt cctggccttt tggggatgtg ctgtgcaaga tagtaatttc cattgattac tacaacatgt tcaccagcat cttcacctg accatgatga cgtgggaccg ctacattgcc gtgtgccacc cgtgaaggc tttggacttc cgcacacct tgaaggcaaa gatcatcaat atctgcatct gctgctgtc gtcattctgtt ggcattcttg caatagtctt tggaggcacc aaagtcaggg aagacgtcga tgtcattag tgcctcttg agttccaga tgatgactac tctgtgtggg acctctcat gaagatctgc gtcttcatct ttgcctctgt gatecctgtc ctacatca tegtctgcta caccctgatg atcctgcgtc tcaagagcgt cggctcctt tctggctccc gagagaaaga tcgcaacctg cgtaggatca ccagactggt cctgtgtgtg gtggcggttt tegtctctg ctggactccc attcacatat tcatcctggt ggaggtctg gggagcacct cccacagcac agctgctctc tccagctatt acttctgcat cgcttaggc tataccaaca gtagcctgaa tccccatttc tacgcctttc ttgatgaaaa cttcaagcgg tgtttccggg acttctgctt tccactgaag atgaggtgg agcggcagag cactagcaga gtccgaaata cagttcagga tcctgcttac ctgagggaca tcgatgggat gaataaacca gtagactag tctgtggagat gtcttcgtac ag NP_000903.1 MESPIQIFRG EPGTCAPSA CLPNSSAWF PGWAEPSDNG SAGSEDAQLE PAHISPAIPV P IITAVYSVVF VVGLVGNLVL MFVIRYTKM KTATNIYIFN LALADALVTT TMPFQSTVYL MNSWPFQDVL CKIVISIDYY NMFTSIFTLT MMSVDRIYAV CHPVKALDFR TPLKAKLINI CIWLLSSSVG ISAILVGGTK VREDVDVIEC SLQFPDDDDYS WMDLFMKICV FIFAFVLPVL IIIVCYTIMI IRLKSVRLLS GSREKDRNLR RITRLVLVV AVFVVCWTPI HIFILVEALG STSHSTAALS SYFFICIALGY TNSSLNPILY AFLDENFKRC FRDFCFPLKM RMERQSTSRV RNTVQDPAYL RDIDGMNKPV NM_000233 ggccgcccac gaagcagcgg ttctcgccgc tgcagctgct gaagctgctg ctgctgctgc A	Homo sapiens
147	2783	Opioid Receptor, kappa 1 (OPRK1)	NM_000912	tgcagcactc accatggaat ccccgattca gatcttcgc ggggagcctg gccctacctg A cgccccgagc gctgcctgc cccccacag cagcgccctgg ttccccggct gggccgagcc cgacagcaac ggcagcgccg gctcggagga cgcgagctg gagcccgcg acatctcccc ggccatcccg gtcacatca cgcggtcta ctcgtagtg ttcgctggtg gcttgggtgg caactcgtg gtcatgttcg tgatcatccg atacacaaag atgaagacag caaccaacat ttacatattt aacctggctt tggcagatgc tttagttact acaaccatgc ccttcagag tacgggtctac ttgatgaatt cctggccttt tggggatgtg ctgtgcaaga tagtaatttc cattgattac tacaacatgt tcaccagcat cttcacctg accatgatga cgtgggaccg ctacattgcc gtgtgccacc cgtgaaggc tttggacttc cgcacacct tgaaggcaaa gatcatcaat atctgcatct gctgctgtc gtcattctgtt ggcattcttg caatagtctt tggaggcacc aaagtcaggg aagacgtcga tgtcattag tgcctcttg agttccaga tgatgactac tctgtgtggg acctctcat gaagatctgc gtcttcatct ttgcctctgt gatecctgtc ctacatca tegtctgcta caccctgatg atcctgcgtc tcaagagcgt cggctcctt tctggctccc gagagaaaga tcgcaacctg cgtaggatca ccagactggt cctgtgtgtg gtggcggttt tegtctctg ctggactccc attcacatat tcatcctggt ggaggtctg gggagcacct cccacagcac agctgctctc tccagctatt acttctgcat cgcttaggc tataccaaca gtagcctgaa tccccatttc tacgcctttc ttgatgaaaa cttcaagcgg tgtttccggg acttctgctt tccactgaag atgaggtgg agcggcagag cactagcaga gtccgaaata cagttcagga tcctgcttac ctgagggaca tcgatgggat gaataaacca gtagactag tctgtggagat gtcttcgtac ag NP_000903.1 MESPIQIFRG EPGTCAPSA CLPNSSAWF PGWAEPSDNG SAGSEDAQLE PAHISPAIPV P IITAVYSVVF VVGLVGNLVL MFVIRYTKM KTATNIYIFN LALADALVTT TMPFQSTVYL MNSWPFQDVL CKIVISIDYY NMFTSIFTLT MMSVDRIYAV CHPVKALDFR TPLKAKLINI CIWLLSSSVG ISAILVGGTK VREDVDVIEC SLQFPDDDDYS WMDLFMKICV FIFAFVLPVL IIIVCYTIMI IRLKSVRLLS GSREKDRNLR RITRLVLVV AVFVVCWTPI HIFILVEALG STSHSTAALS SYFFICIALGY TNSSLNPILY AFLDENFKRC FRDFCFPLKM RMERQSTSRV RNTVQDPAYL RDIDGMNKPV NM_000233 ggccgcccac gaagcagcgg ttctcgccgc tgcagctgct gaagctgctg ctgctgctgc A	Homo sapiens
148	2783	Opioid Receptor, kappa 1 (OPRK1)	NP_000903.1	tgcagcactc accatggaat ccccgattca gatcttcgc ggggagcctg gccctacctg A cgccccgagc gctgcctgc cccccacag cagcgccctgg ttccccggct gggccgagcc cgacagcaac ggcagcgccg gctcggagga cgcgagctg gagcccgcg acatctcccc ggccatcccg gtcacatca cgcggtcta ctcgtagtg ttcgctggtg gcttgggtgg caactcgtg gtcatgttcg tgatcatccg atacacaaag atgaagacag caaccaacat ttacatattt aacctggctt tggcagatgc tttagttact acaaccatgc ccttcagag tacgggtctac ttgatgaatt cctggccttt tggggatgtg ctgtgcaaga tagtaatttc cattgattac tacaacatgt tcaccagcat cttcacctg accatgatga cgtgggaccg ctacattgcc gtgtgccacc cgtgaaggc tttggacttc cgcacacct tgaaggcaaa gatcatcaat atctgcatct gctgctgtc gtcattctgtt ggcattcttg caatagtctt tggaggcacc aaagtcaggg aagacgtcga tgtcattag tgcctcttg agttccaga tgatgactac tctgtgtggg acctctcat gaagatctgc gtcttcatct ttgcctctgt gatecctgtc ctacatca tegtctgcta caccctgatg atcctgcgtc tcaagagcgt cggctcctt tctggctccc gagagaaaga tcgcaacctg cgtaggatca ccagactggt cctgtgtgtg gtggcggttt tegtctctg ctggactccc attcacatat tcatcctggt ggaggtctg gggagcacct cccacagcac agctgctctc tccagctatt acttctgcat cgcttaggc tataccaaca gtagcctgaa tccccatttc tacgcctttc ttgatgaaaa cttcaagcgg tgtttccggg acttctgctt tccactgaag atgaggtgg agcggcagag cactagcaga gtccgaaata cagttcagga tcctgcttac ctgagggaca tcgatgggat gaataaacca gtagactag tctgtggagat gtcttcgtac ag NP_000903.1 MESPIQIFRG EPGTCAPSA CLPNSSAWF PGWAEPSDNG SAGSEDAQLE PAHISPAIPV P IITAVYSVVF VVGLVGNLVL MFVIRYTKM KTATNIYIFN LALADALVTT TMPFQSTVYL MNSWPFQDVL CKIVISIDYY NMFTSIFTLT MMSVDRIYAV CHPVKALDFR TPLKAKLINI CIWLLSSSVG ISAILVGGTK VREDVDVIEC SLQFPDDDDYS WMDLFMKICV FIFAFVLPVL IIIVCYTIMI IRLKSVRLLS GSREKDRNLR RITRLVLVV AVFVVCWTPI HIFILVEALG STSHSTAALS SYFFICIALGY TNSSLNPILY AFLDENFKRC FRDFCFPLKM RMERQSTSRV RNTVQDPAYL RDIDGMNKPV NM_000233 ggccgcccac gaagcagcgg ttctcgccgc tgcagctgct gaagctgctg ctgctgctgc A	Homo sapiens
149	2964	Luteinizing	NM_000233	aggctggcca accgcaactc ccacaaaact tctctgaggt ccaacgcctc tcagctgtcc aggacccaaa gccgagaacc caggcaacag gaagagaac ccctgaagct ccaggtgtgg agtgggacag aagtcacggc cccccaggga gccacagaca ggtaatagcc cttagccattg gtgcacagga tgggggcaat gggaggggat gctactgatg ggaatgatta agggagctgc tgtttaggtg gtgctggttt atgttctagg aactctcat gagcactttg taaacacct cttgcttaat cctcccaacg gcccccaag gtagaacta gctccctttt aaaaaggagca cattaaaatt ctgagaggac ttggcaaggg ccgcacagct ggggcat MAPNGTASSF CLDSTACKIT ITVVLAVLIL ITVAGNVVVC LAVGLNRRRL NLNCFIVSL P AITDLLGLL VLPFSAIYQL SCWSEFGKVF CNIYTSLDVM LCTASILNLF MISLDRYCAV MDPLRYPVLV TPRVAISLV LIWVISITLS FLSIHLGWS RNETSNGNHT TSKCKVQVNE VYGLVDGLVT FYLPLLIMCI TYRIFKVAR DQAKRINHIS SWKAATIREH KATVTLAAM GAFIICWEPY FTAIFYRGLR GDDAINEVLE AIVMLGYAN SALNPILYAA LNRDFTGYQ QLFCCRLANR NSHKTSLRSN ASQLSRTQSR EPRQKEKPL KIQWWSGTEV TAPQATDR tgcagcactc accatggaat ccccgattca gatcttcgc ggggagcctg gccctacctg A cgccccgagc gctgcctgc cccccacag cagcgccctgg ttccccggct gggccgagcc cgacagcaac ggcagcgccg gctcggagga cgcgagctg gagcccgcg acatctcccc ggccatcccg gtcacatca cgcggtcta ctcgtagtg ttcgctggtg gcttgggtgg caactcgtg gtcatgttcg tgatcatccg atacacaaag atgaagacag caaccaacat ttacatattt aacctggctt tggcagatgc tttagttact acaaccatgc ccttcagag tacgggtctac ttgatgaatt cctggccttt tggggatgtg ctgtgcaaga tagtaatttc cattgattac tacaacatgt tcaccagcat cttcacctg accatgatga cgtgggaccg ctacattgcc gtgtgccacc cgtgaaggc tttggacttc cgcacacct tgaaggcaaa gatcatcaat atctgcatct gctgctgtc gtcattctgtt ggcattcttg caatagtctt tggaggcacc aaagtcaggg aagacgtcga tgtcattag tgcctcttg agttccaga tgatgactac tctgtgtggg acctctcat gaagatctgc gtcttcatct ttgcctctgt gatecctgtc ctacatca tegtctgcta caccctgatg atcctgcgtc tcaagagcgt cggctcctt tctggctccc gagagaaaga tcgcaacctg cgtaggatca ccagactggt cctgtgtgtg gtggcggttt tegtctctg ctggactccc attcacatat tcatcctggt ggaggtctg gggagcacct cccacagcac agctgctctc tccagctatt acttctgcat cgcttaggc tataccaaca gtagcctgaa tccccatttc tacgcctttc ttgatgaaaa cttcaagcgg tgtttccggg acttctgctt tccactgaag atgaggtgg agcggcagag cactagcaga gtccgaaata cagttcagga tcctgcttac ctgagggaca tcgatgggat gaataaacca gtagactag tctgtggagat gtcttcgtac ag NP_000903.1 MESPIQIFRG EPGTCAPSA CLPNSSAWF PGWAEPSDNG SAGSEDAQLE PAHISPAIPV P IITAVYSVVF VVGLVGNLVL MFVIRYTKM KTATNIYIFN LALADALVTT TMPFQSTVYL MNSWPFQDVL CKIVISIDYY NMFTSIFTLT MMSVDRIYAV CHPVKALDFR TPLKAKLINI CIWLLSSSVG ISAILVGGTK VREDVDVIEC SLQFPDDDDYS WMDLFMKICV FIFAFVLPVL IIIVCYTIMI IRLKSVRLLS GSREKDRNLR RITRLVLVV AVFVVCWTPI HIFILVEALG STSHSTAALS SYFFICIALGY TNSSLNPILY AFLDENFKRC FRDFCFPLKM RMERQSTSRV RNTVQDPAYL RDIDGMNKPV NM_000233 ggccgcccac gaagcagcgg ttctcgccgc tgcagctgct gaagctgctg ctgctgctgc A	Homo sapiens

Hormone/Chor
iogonadotrop
in Receptor

sapiens

agccgcgcgt gccacgagcg ctgcgcgagg cgctctgccc tgagccctgc aactgcgtgc
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ataacagatc agaaatttaa ataagggggc tttttcctca ggtagtttga aaaaacact

150 2964 Luteinizing NP_000224.1 Hormone/Chor
iogonadotrop
in Receptor sapiens

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NLPLKYLISI CNTGIRKFPD VTKVFSSES FILEICDNLH ITTIPGNAFQ GNNESVTLK
LYNGNGFEEVQ SHAFNGTTLT SLELKENVHL EKMNGAFRG ATGPKTLDIS STKLQALPSY
GLESIQRLIA TSSYSCLKLP SRETFVNLE ATLTPSHCC AFRNLPTKEQ NFHSISENF
SKQCESTVRK VSNKTLYSSM LAESELGWD YEYGFCLPKT PRCAPEPDAF NPCEDIMGYD
FLRVLWLIN ILAIMGNMTV LFVLLTSRYK LTVPRFLMCN LSFADFCMGL YLLLIASVDS
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IICACYIKIY FAVRNPELMA TNKDKTKIAKK MAILIFTDET CMAPISFFAI SAAFKVPLIT
VTNSKVLVL FYPINSCANP FLXAIFTKTF QRDFELLISK EGCKRRRAEL YRRKDFESAYT
SNCKNGFTGS NKPSQSTLKL STLHCQGTAL LDKTRYTEC

151 2976 Lysophosphat NM_001401
idic Acid
Receptor
Edg2

Homo
sapiens

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ggctggaaact gtatctgtga tattgaaaat tgttccaaca tggcacccct ctacagtgc
tcttacttag tcttctgggc cattttcaac ttggtgacct ttgtggtaat gggtgttctc
tatgtcaca tcttgggcta tgttcgccag agactatga gaatgtctcg gcatagtctt
ggaccccgcc ggaatcgga taccatgatg agtcttctga agactgtggt cattgtgctt
ggggccttta tcatctgctg gactctgga ttggttttgg tacttctaga cgtgtgctgt
ccacagtgcg acgtgctggc ctatgagaaa ttcttctctc tcttgcgtga attcaactct

152	2976	Lysophosphat NP_001392.1 idic Acid Receptor Edg2	gcatgaacc ccattcattta ctctacccg gacaaagaaa tgagcgccac ctttaggcag atcctctgct gccagcgag tgagaaacccc accggcccca cagaaggctc agaccgctcg gcttctctccc tcaaccacac catcttggtt ggagttcaca gcaatgacca ctctgtggtt tagaacggaa actgagatga ggaaccagcc gtccctctctt ggagataaaa cagcctcccc ctaccacaatt gccagggcaa ggtggggtgt gagagaggag aaaagtcaac tcatgtactt aaacactaac caatgacagt atttgttctt ggacccacca agacttgata tatattgaaa attagcttat gtgacaaccc tcatcttgat ccccatccct tctgaaagta ggaagttgga gctcttgcaa tggaaattcaa gaacagactc tggagtgctc atttagacta cactaactag acttttaaaa gatcttggtt ggtttggtgc aagtcagaat aaattctggc tagttgaatc cacaacttca tttatataca ggtctccctt ttttattttt aaaggatacgt tttcacttaa taaacacggt tatgcctatc agcatgtttg tgatggatga gactatggac tgcttttaaa ctaccataat tccatttttt cctttacata ggaacactgt aagttggaat tatcttttgt ttagaaagca tgcattgtaat gtatgtatgc agtatgcctt acttaaaaag attaaaagga tactaatgtt aaatcttcta ggaatataga cctagacttc aaagccagta tttgtttagg tcatgaagca acaatgctc taatcacat attaatgtt taattaaaaat gttgtaacaa gtataaaaca ggaatgttaa gtttattacc aaagtatat gtattccaaa aaagtcatag aagatgaagc actataatai tgttcccata tatttaaaat acccaagtac attctaatta ccagtatatc agaggaaaat tttcgtatgc tttgtaaaat aatatactca tcataaaaa cttgaaaaat gcagaaaatgt ataaaaaagc aaaaatgatt actgataata tcacacccca gaagtaacca cctttaaaaa gcaaccccca tgtatgccta tgttgtatt gtatactttt tttacataat tggagtcata ctgtaaacag ttttataagt agatcttttt cattgcaaaa ttgccacatt tcttatggc attaaaaatt ttacaaaaac ataattttta tggctatat atattccatt taatggatgc aactcagttt atttaacat tcccatgttg ttaactattt aggtgttttc taattttcat tattataaag tgcagaaat ttggtgt	Homo sapiens
153	3038	G Protein-Coupled Receptor MRG	ttttgtattt gttgcaccct aagctctgtc atttcttct cctcagctga catttgagc A atagcagtcg atgatgcccc cacagacact gcctgagact cagccccctg gaaaaacgca gatttcctta ttttccaggt caagtctgc cagccataga aaggacttct ttggtgccaa ctgctgtgaa atgcctgcct tggaaatctc agtgcctcct tgtacctgtc tgagccaggg gaaatgccat actgtggcac tgcctgcattc tgtatggcta ccaaggatg cccaggactg gtttgaaaaga gatgagacat gcccaggtgc gtggctcacg ctgttaatcc agcactttgg gaggtcaagg cagtggatca caaggtcaga gttgagacca gccaggccaa tatggtgaaa accccatctc tactaaaaat acaaaaaatt agccgggcaa tgggtggtggg tgccttagt tccagctagt caggaggccg aggcagagaga atcgcttgaa cctggaaggt ggaggttcca gtgagctgag atcgcgccac tgcactccag cctgggtgac agagtgcag tccaactcaa	Homo sapiens

154	3038	G Protein- Coupled Receptor MRG	AAB21255.1	<p> aaaaaaaaa aaaaagaga tgaacacta gtgtctcatg agtagaacct ggaccagaca caaatctcca ttcccaatgt ttagtgctc attagtcccc aacaacaaga tattgggtct atgtgggtag gcctggggca tcctgtacaa caggagatgt gtaggggag ggagaacaga tcacaaatc atggagagct attgacagag cagatactcc catccactct gatagttagt taatgttcag ctgttccctaa aaagcacacc caacaatggg tgttctattc cagcctagga aaatgtagag gcaaggggtc tgaggccaga ggacaccact agatggacca ctgtctcctga ctgtgatgtt gtggcccact caggtcccag caccocatgg tctgggggaa aatttgcctgg ttcagccaga gggctggatg gacagtgtt ctaggtgac agatatctct ctcatgtagc ctttgtctcc acagtgtga ccaggaggca cagaacccaa acctggtatc tcagctctgt ggcgtcttcc ttcaaaatga gacgaatgaa accatacata tgcagatgag catggcagtg ggacagcagg cctgcccctt gaatactatt gcccacaagg ctgtgctggt ctccctctgt gggtctttat tgaatggcac tgtcttctgg ctgctttgct gggggccac gaatccctac atgtatata tctccacct ggtcgtgct gacgtgatct atctttgctg ctcggcagtg gggtctttac agtgactct gctaaacttat catggagtgc tgttttttat cctgatttc ctggccatat tgtctccctt ctcttttgag gtgtgtctct gtctcctggt ggccatcagc acagagcgggt gtgtgtgtgt cctcttcccc atctgttaca gatgccaccg cccaaaatac acatctaata gtgtctgcac cctcatctgg ggcctgcctt ttgcatcaa catagtaaaa tcacttttcc taacttactg gaaacatgta aaggcatgtg tcataattct aaagctttct gggtcttccc atgtatctct ttcactgtg atgtgtgtgt cgagtctgac tctactcatt agattcctgt gctgctccca gcagcaaaa gcccacaggg tctatgcggt ggtgcagatc tcggccccc tgttccctact ctgggcccta cccctgagcg tggcaccct cataacagat ttcaaaaatgt ttgtcaccac ctctattta atttcttctg tctcattat aaacagcagc gccaaacctc tcatttattt ctttgtggg agcctcagaa agaaaaggct gaaggaatct ctcagagtga ttctccaaag ggcgttagca gataagccag aggtggggag gaacaaaaag gcagctggca tcgacccaat ggagcaacca cactctactc agcatgtgga gaaccttctt cccaggagc acagggtcga tbtggaaaca taatttccca catctgagct ggggaattgt acacatagta accagcctg tctgcatca taaggctgct gcatacaatc aatgctttat tctaatacag ttacagcttc atggactttc aaaaacacc ctltgctgttt gtggttgga gagacattaa ctctcttctt aggcagtaag ccagtttga atgtgctcca gtcccaacga tgagggggaat gggaccagt gagactttcc tggtaacctgt ggaatccaaa taaagacct acaaaggcat gaattc </p>	Homo sapiens
155	3057	Melanocortin 3 Receptor (MC3R)	NM_019888	<p> MVGKICWFS QPAGTTFVAF SQISLCSLC LHSGDQEAQN PNLVSQLCGV FLQNETNETI P HMQMSMAVGQ QALPINIIAP KAVLVSLCGV LLNGTVFWLL CCGATNPYV YILHLVAADV IYLCCSANGF IQVTLITYHG VVEFIPDFLA ILSPFSFEVC LCLLVAISTE RCVCVLPFIW YRCHRPKYTS NVVCTLIWGL PFCINIVKSL FLTYYKHKVKA CVIFLKLGL FHALSLVMC VSSLTLIRF LCCSQQKAT RVYAVVQISA PMFLWLALPL SVAPLITDFK MFVTSYLLS LFLIINSSAN PIYFFVGS L RKRLKESLR VILQALADK PEVGRNKKAA GIDPMEQPHS TQHVENLLPR EHRVDVET </p>	Homo sapiens

156	3057	Melanocortin NP_063941.1 3 Receptor (MC3R)	MSIQKYLEG DFVFPVSSS FLRTLLEPQL GSALLTAMNA SCCLPSVQPT LPNGSEHLQA P PFFSNQSSA FCEQVFIKPE IFLSLGIIVSL LENILVILAV VRNGNLHSPM YFFLCSLAVA DMLVSVSNAL ETIMIAIVHS DYLTFEDQFI QHMDNIFDSM ICISLVASIC NLLAIAVDRY VTIFYALRYH SIMTVRKALT LIVAIWVCCG VCGWVFIYS ESKMVIVCLI TMFFAMMLLM GTLVHMFLEF ARLHVKRIAA LPPADGVAPQ QHSCMKGAVT ITILGVFIF CWAPFFHLHV LIITCTPNPY CICYTAHENT YLVLMCNVS IDPLIYAFRS LELRNTFREI LCGCNGMNLG atggtgaaact ccaaccacccg tgggatgcac actctctgc accctctggaa ccgcagcagt A tacagactgc acagcaatgc cagtgagtcc cttggaaaag gctactctga tggagggtgc tacgagcaac tttttgtctc tcttgaggtg tttgtgactc tgggtgtcat cagcttgttg gagaatatct tagtgattgt ggcaatagcc aagaacaaga atctgcattc acccatgtac tttttcatct gcagcttgcc tgtggctgat atgctggtga gcgtttcaaa tggatcagaa accattatca tcacctatt aacagtaga gatacggatg cacagagttt cacagtgaat attgataatg tcattgactc ggtgatctgt agtccttgc ttgcattccat ttgcagcctg ctttcaattg cagtggacag gtactttact atcttctatg ctctccagta ccataacatt atgacagtta agcgggttgg gatcatcata agttgtatct gggcagcttg cagggtttca ggcattttgt tcatcattta ctcagatagt agtgcgtgca tcatctgcct catcaccatg ttcttcacca tgcgtgctct catggcttct ctctatgtcc acatgttctt gatggccagg cttcacatta agaggattgc tgtcctccc ggcaactggtg ccacgcgcca aggtgccaat atgaaggagg cgattacctt gaccatcctg attggcgtct ttgttgtctg ctgggcccc ttcttccctc acttaattt ctacatctct tgcctcaga atccatattg tgtgtgcttc atgtctcact ttaacttgta tctcactg atcatgtgta attcaatcat cgatcctctg atttatgcac tccgagtgca agaactgagg aaaccttca aagagatcat ctgttgctat ccccgggag gcctttgtga cttgtctagc agatattaa 157	3058	Melanocortin NM_005912 4 Receptor (MC4R)	ENILVIVAIA KNKNLHSPMY FFICSLAVAD MLVSVSNGSE TIIITILNST DTDAQSFTVN MVNSTHRGMH TSLHLNRRSS YRLHSNASES LGKGYSDGGC YEQLFVSPEV FVTIGVISLL P 3058	Melanocortin NP_005903.1 4 Receptor	158
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159	3059	(MC4R)	Melanocortin 5 Receptor (MC5R)	NM_005913	IDNVIDSVIC SLLASICSLS LSIADVRYFT IFYALQYHNI MTKVRVGIII SCIWAACVTS GILFIYSDS SAVIICLITM FFTMLALMAS LYVHFMFLMAR LHIKRIAVLP GTGAIRQGAN MKGAITLTIL IGVEFVVCWAP FFLHLIFYIS CPQNPYCVCF MSHENLYLIL IMCNSIIDPL IYALRSQELR KTFKEIICCY PLGGLCDLSS RY atgaattcct cattcacct gcatttcttg gatctcaacc tgaatgccac agagggcaac A ctttcaggac ccaatgtcaa aaacaagtct tcaccatgtg aagacatggg cattgctgtg gaggtgttc tcaactggg tgatcatcagc ctcttgaga acatcttggt cataggggccc atagtgaaga acaaaaacct gcactcccc atgtacttct tegtgtgcag cctggcagtg gcggacatgc tggtagagcat gtccagtgc tgggagacca tcaccatcta cctactcaac aacaagcacc tagtgatagc agacgccttt gtgcgccaca ttgacaatgt gttgactcc atgatctgca tttccgtggt ggcattccatg tgcagcttac tggccattgc agtggatagg tacgtcacca tcttctacgc cctgcgtac caccacatca tgacggcgag gcgtcaggg gccatcatcg ccggcatctg ggccttctgc acgggctgcg gcattgtctt cctcctgtac tcagaatcca cctacgtcat cctgtgcctc atctccatgt tcttcgctat gctgttctc ctgggtgtctc tgtacataca catgttctc ctggcgcgga ctacgtcaa gcggatcgcg gctctgcccg gggccagctc tgcgcggcag aggaccagca tgcagggcg gcacaccgtc accatgctgc tggcggtgtt taccgtgtgc tgggccccgt tcttcttca tctcacttta atgctttctt gccctcagaa cctctactgc tctcgttca tgtctcactt caatatgtac ctcatactca tcatgtgtaa ttcggtgatg gaccctctca tatatgcctt ccgcagccaa gagatgcgga agacctttaa ggagattatt tgctgcctg gtttcaggat cgctgcagc tttcccgaa gggattaa	Homo sapiens
					160	3059
161	3061	(MC1R)	Melanocortin 1 Receptor	NM_002386	Homo sapiens	
					Homo sapiens	

Accession	Gene	Protein	Species
162	3061 Melanocortin 1 Receptor (MC1R)	NP_002377.2	Homo sapiens
163	3079 Melatonin Receptor type 1a	NM_005958	Homo sapiens

164	3079	Melatonin Receptor type 1a	NP_005949.1	<p> cacaaccaca accaacacaca caaacctttc agctggcaga gttagcattg ggtagctata ctcatggtca taaatgtttg ccgctctata ttacaagtgg tgcatgcaac cagataaaga actaaatcat aggcgggga cagtcgctca cactgtaac ctgagcactt tgggaggctg aggtgggcag atcaactgag ttgaggagtt tgagaccacc ctgggggaac atgatgaaat cccatctcta aaaaaataca aaaaattatc tgggcatggt gcacacgctt gtaatcccgag ctactcagga gactgagtta ggagaatccc ttgagcccca gaggcagagg ttgtggtgag ccgagatcgc gccagtacat tccaacttag gctacagaat gagactctgc ccaaaaaaaa aaaaaaa </p>	Homo sapiens
165	3080	Melatonin Receptor type 1b	NM_005959	<p> acgcgagctg ggcagggaag agagcgccc gctcagtaact gcgcgcgcc tgcggctgtc A cggggccgcg cggtagccaa agcacagcg gggagagtct gcgatgtcag agaacggctc cttcgccaac tgcgagagg cggcggtg ggcagtcgc cgggctggt cgggggctgg cagcgcgcg cctccagga cccctcgacc tccctgggtg gctccagcg tgcgcgctg gctcatcgtc accaccgcg tggacgtcgt gggaacctc ctggtgatcc tctccgtgct caggaaccgc agctccgga acgcaggtaa ttgttcttg gtgagtcctg cattggctga cctggtggtg gccttctacc cctaccgct aatcctcgt gccatcttct atgacggctg ggccctgggg gaggagcact gcaaggccag cgcctttgtg atgggctga gcgtcatcgg ctctgtcttc aatatcactg ccatcgccat taacgctac tgctacatct gccacagcat ggcctaccac cgaatctacc cgcgctggca caccctctg cacatctgcc tcatctggct cctcaccgtg gtggccttgc tgccaaactt ctttgtggg tccctggagt acgacccacg catctattcc tgcacctca tccagaccgc cagcaccag tacacggcg cagtgggtggt catccacttc ctctcccta tgcgtgctgt gtcttctgc tacctgcga tctgggtgct ggtgcttcag gccgcagga agccaaagcc agagagcagg ctgtgcctga agccacgca cttgccgagc ttcttaacca tgtttgtggt gtttgtgatc ttggccatct gctgggctcc acttaactgc atcgccctcg ctgtggccat caaccccaa gaaatggctc ccagatccc tgaggggcta ttgtcacta gctacttact ggttatctc aacagctgcc tgaatgccat tgtctatggg ctcttgaacc aaaacttccg caggaataac aagagatcc tcttggccct ttggaaccca cggcactgca ttcaagatgc ttccagggc agccacgcg aggggctgca gagccagct ccaccatca ttggtgtgca gcaccaggca gatgctctct agcctggatc tgaggcacac cagcagcatg acaactcat gaaatgtgg gagagatct gctgcaaggg tgagaccagg cagcctgctg ggccacactg tccctgtggc atcacagccc caaggctggg ggaacttcat gctgggacaa gcagccatc aacgcccagg gttcaggctg atccaggaga tgctcacagg ccacaggacc tggaaaacac tcttgggtgt gtcttgggga ttgtgtgac acaagaccaa ggaaggaca gaatgaggaa aggcctgggg cagaagagcc caactcctc tcatagctga cctcatcct cctgccttgg cctcctggt gcttctccc cttccccc gcatggcagg atctcttct gtagcaagg atgaaagaga gaggtcagta ggactggaac </p>	Homo sapiens

166	3080	Melatonin Receptor type 1b	NP_005950.1	<p>ttggttaacta caagggcctc aggtgggca ggtgcagag 9c</p> <p>VILSVLRNRK LRNAGNLFV SLALADLVA FYPYPLILVA IFYDGLALGE EHCKASAFVM</p> <p>GLSVIGSVEN ITAIAINRYC YICHSMAYHR IYRRWHTPLH ICLILLTWV ALLPNFFVGS</p> <p>LEYDPRIYSC TFIQTASTQY TAAVVIHFL LPIAVWFCY LRIWLVLOA RRKAKPESRL</p> <p>CLKPSDLRSF LTMFVVFVIF AICWAPLNCI GLAVAINPQE MAPQIPEGLF VTSYLLAYFN</p> <p>SCINAIIVYGL LNONFREYK RILLALMNPR HCIQDASKGS HAEGLOSPAP PIIGVQHQAD</p> <p>AL</p>	Homo sapiens
167	3081	Melatonin- Related Receptor	NM_004224	<p>tggttgctgt ctggacctgg ctgctgatcc ttagcctgct gggagatctt aacgatcccc A</p> <p>aggagcaaca tggggccac cctagcgggt cccacccct atggtgtgtat tggctgtaag</p> <p>ctacccagc cagaataccc accggctcta atcatcttta tgtctgcgc gatggttacc</p> <p>accatcgttg tagacctaat cggcaactcc atggtcattt tggctgtgac gaagaacaag</p> <p>aagtcgga atctggcaa catcttcgtg gtcagtcctt ctgtggcga tatgctggtg</p> <p>gccatctacc catacccttt gatgctgcat gccatgtcca ttgggggctg ggtctgagc</p> <p>cagttacagt gccagatggt cgggttcac acagggtga gtgtggtcgg ctccatcttc</p> <p>aacatcgttg caatcgctat caaccgttac tgcatactt gccacagcct ccagtacgaa</p> <p>cggatcttca gtgtggcaa tacctgcat tacctggta tccctggat catgaccgtc</p> <p>ctggctgtcc tggccaacat gtacattggc accatcagat acgatcctcg caccacacc</p> <p>tgcatttca actatctgaa caacctgtc ttcactgta ccatcgtctg caccacttc</p> <p>gtcctccctc tctcatcgt ggtttctgc tacgtgagga tctggaccaa agtgcgtggc</p> <p>gcccgtgacc ctgcaggga gaacctgac aaccaacttg ctgaggttcg caattttcta</p> <p>accatgtttg tgatcttct cctctttgca gtgtgctggt gccctatcaa cgtgctcact</p> <p>gtcttggtgg ctgtcagtc gaaggagatg gcaggcaaga tcccaactg gctttatctt</p> <p>gcagcctact tcatagccta cttcaacagc tgcctcaacg ctgtgatcta cgggctcctc</p> <p>aatgagaatt tccgaagaga atactggacc atcttccatg ctatgggca ccctatcata</p> <p>ttctccctg gccatcatcag tgatatctgt gagatgcagg aggccgtac cctggcccg</p> <p>gcccgtgcc atgtctcga ccaagctcgt gaacaagacc gtgccatgc ctgtcctgct</p> <p>gtggaggaaa cccgatgaa tgtccggaat gttccattac ctggtgatgc tgcagctggc</p> <p>caccccgacc gtgctctgg ccacctaaag ccccatcca gatcctcctc tgcctatcgc</p> <p>aaatctgct ctaccacca caagtctgtc tttagccact ccaaggctgc ctctgggtcac</p> <p>ctcaagcctg tctctggcca ctccaagcct gcctctggtc acccaagtc tgccactgtc</p> <p>taccctaagc ctgctctgt ccatttcaag ggtgactctg tcaattbcaa ggtgactct</p> <p>gtccatttca agcctgactc ttttcatctc aagcctgctt ccagcaaccc caagcccatc</p> <p>actggccacc atgtctctgc tggcagccac tccaagtctg cctcaagtgc tgccaccagc</p> <p>caccctaaac ccataagcc agctaccagc catgctgagc ccaccactgc tgactatccc</p> <p>aagcctgcca ctaccagcca cctaagccc gctgctgctg acaaccctga gctctctgcc</p> <p>tccattgccc ccgagatccc tgcattgccc caccctgtgt ctgacgacag tgacctcctt</p> <p>gagtcggcct ctagccctgc cgtggggccc accaagcctg ctgccagcca gctggagtct</p> <p>gacaccatcg ctgaccttcc tgacctact gtagtacta ccagtaccaa tgattaccat</p> <p>gatgtcgtgg ttgttgatgt tgaagatgat cctgatgaa tggctgtgtg aaaaatgctc</p> <p>tcgtaggtgg ccaggcagt</p>	Homo sapiens

168	3081	Melatonin- Related Receptor	NP_004215.1	MGPTLAVPTP NSGNIFVSL AIAINRYCYI NYLNNPVFTV VIFLLFAVCW FREYWTIFH TPMNVNVP VSGHSKPASG HVSAGSHSKS PEIPAIAHPV VVDVEDDPDE MAV	YGCIGCKLPQ SVADMLVAIY CHSLQYERIF TIVCIHFVLP CPINVLTVLV AMRHPPIFFP PGDAAAGHPD HPKSATVYPK AFSAATSHPK SDDSDLPESA SSPAAGPTKP AASQLESDTI ADLPDPTVVT TSTNDYHDVV	MECAMVITIV IGGWDLSQLQ ITWIMTVLAV IWKVLAARD IPNWLYLAA EARTLARARA HARDQAREQD RSSHKSAYRKA VHFKGDSVHF PTTADYPKPA TTSHPKPAAA DNPELSASHC TSTNDYHDVV	VDLIGNSMVI QCMVGFI LPNMYIGTIE PAGQPNQOL FIAYFNSCLN HARDQAREQD RSSHKSAYRKA VHFKGDSVHF PTTADYPKPA TTSHPKPAAA DNPELSASHC TSTNDYHDVV	LAVTKNKKLR SVVGSIFNIV YDPRTYTCIF AEVRNFLTME AVIYGLNEN RAHACPAVEE SKAASGHLKP SSNPKPITGH DNPELSASHC TSTNDYHDVV	Homo sapiens
169	3093	Metabotropic Glutamate Receptor 1	NM_000838	gaattccctt acgaaggga ggggcaccac agcgggacca cgggctcctt ccccggcagg cggagatgtc gcccagagag gttccacacg cagtggatgc cattagggac tgacggccag cggctccagc gategcttat gaggtgtgtc caattggacc cgctttcaaa cagcaacgct caaggctaga catgcggcgc cagagatgaa gcagttccca cacgaggaat acaccttctg aaactatgtc tgggctgcag gaagcccatc atctggagag gaatctgcag aggagtgtctg	acaaacgcct aggaggcgtt tccgggagag gcgtgggaac ttgttttttt aaagtgttgc atcattggag aagtgtgggg ttggataaga cgggactcct tctctgattt tccttcccc tctgtagcca tcagccacaa ccttctgaca tatgtctctg gagctggctg ggggagaaga gtggtgtgtc cttggcgtcg gtcattgaa gaggtcaggt cctgtgttcc gaaatccca caggacagta acatgcacc atgcctctg agctgcagca gaggtgtgtt tgatgagaa tactatgctg ctaactcgta attacaaaat	ccagcttcta ggtggaggag gcggcgctgg gcgtgtggac tcccagcat tggcaggagc ccctcttctc agatcaggga tcaacgcgga gtgtgcactc ccattcgaga caggcaggac ttcaagtga gcctgcacct ctttgcaggc cagtcacac cccaggaaat gctttgaccg gcttctgtga tgggcaggtt gttatgaggt catttgatga ctgagttctg actttaaacg agatggggtt tgatcatcat atgcctctg agctgcagca gaggtgtgtt tgatgagaa tactatgctg ctaactcgta attacaaaat	tgaggagccc tgagcagcca ggtgcgcgc ctcgtcctca gtgtcccttc cgctcgggtg cagcctccgg atccagaggg ctgcccaaca ctggaacaga gggatcaacc attgcgggag cagctctctg acatcccca actttgtaca cttgacatag tatggggaga gcccattctg aaactccgag gtgcgaggac ggaagtgtatg gggggaatca aaactgaggc tattttctctg tccagtgcc ggcaatgaaa ggttagaaga gccatctatg gtgggcctct aagtcctcat cctggaaagg cctgggacat cacgttggaa aagagtggag tgggtgcgtc	Homo sapiens	

tggtgacgt gaggcttgct taaagggcca gattaaggtt atacggaaa gagagtgag
ctgctgctgg atttgacgg cctgcaaga gaataatat gtgcaagatg agttcacctg
caaagcttgt gacttgggat ggtggcccaa tgcagatcta acaggctgtg agccattcc
tgtagctat cttgagtgga gcaacatga atccattata gccatgcct tttcatgctt
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 gtgaatcatg cttattttt actcttaacg ccactaatat acatccctaa tatcacaggg
 cttgtgcatt cagattttta aaaaattagg atagataagg aaaaactta tttcaagt
 taagatgata tcaggttggt ctaagacttt tggggaacac gttcattcaa ctgtgatcac
 ttattact tgaatgccta ctattatctt gattatggg tctcctgaat aaatagatga
 ttagtcttta tgcatactt gttcaaaatt ggagatgtac acatacatc cctatacaa
 gagggccgaa actcttcacc ttgatgtatg tctgataca agttgttcag cttctgttaa
 atgtgttttc cttcggttg ttaactgcctt ttgtcaata atcttgacaa tgcgtatata
 taaatattt ctattatt

Glutamate
Receptor 1 sapiens

KVPERKCGEI REQYGIQORVE AMFHTLDKIN ADPVLPLPNIT LGSEIRDSCW HSSVALEQSI
EFIRDSLISI RDEKXGINRC LPDGQSLPPG RTKKPIAGVI GPGSSSSVAIQ VQNLLQLFDI
PQIAYSATSI DLSDKTLYKY FLRVVPSDTL QARAMLDIVK RYNWTVVSAY HTEGNYGESG
MDAFKELAAQ EGLCIAHSDK IYSNAGEKSF DRLRLKLRER LPKARVVVCF CEGMTVRGLL
SAMRRLGVVG EFSLIGSDGW ADRDEVIEGY EVEANGGITI KLOQSEVRSF DDYFLKLRDL
TNTRNPWFPE FWQHRFQCR L PGHLLNPNE KRICTGNESL EENYVQDSKM GFVINAIYAM
AHGLQNMHA LCPGHVGLCD AMKPIDGSKL LDFLIKSFI GVSSEWVFD EKGDAPGRYD
IMNLQYTEAN RYDYVHVGTW HEGVLNIDY KIQMNKSGV RSVCEPCLK GQIKVIRKGE
VSCCWICTAC KENEXVQDEF TCKACDLGWW PNADLTGCEP IPVRYLEWSN IESIIAIAFS
CLGILVTLFV TLIFFVLYRDT PVKSSSREL CYIILAGIFL GYVCPFTLIA KPTTSCYLQ
RLLVGLSSAM CYSALVTKTN RIARILAGSK KKICTRKPRE MSAWAQVIA SILISVQLTL
VVTLIIMEPP MPILSYPSIK EYVLICNTSN LGWVAPLGYN GLLIMSCITYY AFKTRNV PAN
FNEAKYIAFT MYTTCIIWLA FVPIYFGSNY KIITCFEAVS LSVTVALGCM FTKMYIIIA
KPERNVRSF TTSVVRMHV GDGLPCRSN TELNIFRRKK AGAGNANSNG KSVSWSEPGG
GQVPKGQHMW HRLSVHVKTN ETACNQTA VI KPLTKSYQGS GKSLTFSDTS TKTLYNVEEE
EDAQPIRESF PGSPSMVVRH RVPSAATTPP LPHLTAET PLFLAEPALP KGLPPPLQQQ
QQPPQKSL MDQLQGVVSN FSTAIPDEFA VLAGPGGPN GLRSLYPPPP PQHLQMLPL
QLSTFGEELV SPADDDDDDS ERFKLLQEV YEHEREGNT EDELEEEEE LQAASKLTPD
DSPALTPPSP FRDSVASGSS VPSSPVSESV LCTPPNVSYA SVILRDYKQS SSSL

171 3094 Metabotropic NM_000839
Glutamate
Receptor 2

ccatgggagc gctgcttgctg ctcctggcac tgctgcccgt gtgggtgctg gtggctgagc A
gcccagccaa gaaggtgctg accctggagg gagacttgggt gctgggtggg ctgttcccag
tgcaccagaa gggcgggcca gcagaggact gtggtcctgt caatgagcac cgtggcatcc
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Homo sapiens

172	3094	Metabotropic NP_000830.1 Glutamate Receptor 2	aggtccgctt tgaccgctt ggtgatgta ttggcgcta caacatctt acctatctg gtgcaggcag tggcgctat cgctaccaga agtggtgcta ctgggcagaa ggttgactc tggacaccag cctcatccca tggcctcac cgtcagcgg cccctggcc gctctcgct gcagtgcgc ctgcctccag aatgagtgga agagtgtga gccggcgaa gctgctgct ggctctgcat tccgtgccag ccctatgagt accgatgtga cgaattcact tgcgtgatt gtggcctggg ctactggcc aatgccagc tgaactggctg cttcgaactg cccaggagt acatccgctg gggcgatgc tgggctgtg gacctgtcac catgcctgc ctggtgccc tggccacct gttgtgtcg ggtgtcttg ttggcgcaaa tggcacacca ttggtcaagg cctcagtcg ggagctctg tacatctgc ttggtgtgtg cttcctctgc tactgcatga ccttcattt cattgccaag ccatacagg cagtgtgtac cttacggcgt cttggtttg gcaatgctt ctctgtctg tactcagcc ttgtaccaa gaccaaccg attgcacgca tcttcgttg gggcggtg ggtgccagc ggtgccgtt catcagctt gctcaccagg tggccatct cctggcactt atctgggccc agtgcctat cgtggtcgc ttggtgttg tggaggcacc gggcacaggc agggagacag ccccgaaag cgggaggtg gtgacactgc gctgcaacca ccgcatgca agtatgttg gctcgtggc gtacaatgtg ctctcatcg cgtctgcac gctttatgc ttcaatactc gcaagtccc cgaatactt aacgaggcca agttcattg cttcaccatg tacaccact gcatcatctg cgtggcattg ttgccatct tctatgtcac ctccagtgc taccgggtac agaccaccac catgtgcgtg tcagtcagcc tcagcgctc cgtggtgctt gctgcctct ttgccccaa gctgcacatc atctcttcc agccgcagaa gaacgtggtt agccacggg caccacacag ccgctttggc agtgcgtg ccagggccag ctccagcctt ggccaagggt ctggtccca gttgtcccc actgtttgca atggccgtga ggtggtgac tgcacaact catcgcttg a	Homosapiens
173	3095	Metabotropic NP_000840 Glutamate Receptor 3	RLKMLFALD RINRDPHLLP GVRIGAHILD SCSKDTALE DLVLGLFPV HQKGPAEDC GPVNEHRGIP CPDGSYATHG DAPTAITGVI GGSYSIVSIQ VANLLRLFQI PQISYASTSA KLSDKSRYDY FARTVPPDEF QAKAMAEILR FENWTYVSTE ASEGDIYGETG IEAFELEARA RNICVATSEK VGRAMSRAAF EGVVRAILLQK PSARVAVLFT RSEDARELLA ASQRLNASFT WVASDGMGAL ESVVAGSEGA AEGAITIELA SYPISDFASY FQSLDPWNNS RNPWFREFWE QRFRCSFRQR DCAHSLRAV PFEQESKIME VVNAVYAMAH ALHNMHRALC PNTRLCDAM RPNVGRRLYK DFVLNVKFDA PFRPADTHNE VREDREGDGI GRYNIFTYLR AGSGRYRYQK VGYWAEGLTL DTSLLPWASP SAGPLAASRC SECLQNEVK SVQPEVCCW LCIPCQPYEY RLDEFTCADC GLGYWPNASL TGCFLPQEY IRWGDAMAVG PVTIACLGAL ATLFVLGVFV RHNATPVVKA SGREL CYILL GGVFLCYCMT FIFIAKPSTA VCTLRLGLG TAFSVCYCAL LTKNRIARI FGGAREGAQR PRFISPASQV AICLALISGQ LLIVVAWLTV EAPGTGKETA PERREVVTILR CNHRDASMLG SLAYNVLLIA LCTLYAENTR KCPENFNEAK FIGHTMYTTC IIWLALLPIF YVTSSDYRVQ TTTMCVSVSL SGSVVLGCLF APKLHIILFQ PQKNVVSHRA PTSRFGSAAA RASSSLGQGS GSQFVPTVCN GREVVDSTTS SL cttttgtct ggtatgaggag gaccaacctat gagccagagc ccgggtgtgag gctcaccgccc gcccgtgcca ccgcggtcag ctccagttcc tgccaggagt tgtcgggtgc aggaattttg tgacaggctc tgttagtctg ttcctccctt atttgaagga caggccaaaag atccagtttg gaaatgagag aggactagca tgacacattg gctccaccat tgatatctcc cagagggtaca	Homosapiens

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174	3095	Metabotropic NP_000831.1 Glutamate Receptor 3	tggttggttg caccacaggt tcacatcatc ctggtttcaac ccagagaaga tggtgtcaca cacagactgc acctcaacag gttcagtgtc agtggaaactg ggaccacata ctctcagtc tctgcaagca cgtatgtgcc aacggtgtgc aatgggaggg aagtccctga ctcaccacc tcattctgtt gatttgaat tgacgttcag tctgtgtgtt ttttagactgt tagacaaaag tgctcacgtg cagctccaga atatggaaac agagcaaaaag acaaacctta gtaccttttt ttagaaaacag tacgataaat tatttttgag gactgtatat agtgatgtgc tagaactttc taggtgaggt ctagtgtccc tattattaac aattccccca gaacatggaa ataaccattg tttacagagc tgagcattgg tgacagggtc tgacatgggt agtctactaa aaaaacaaaa aaaaaacaa aaaaaaaaaa acaaaagaaa aataaaaaa tacggtggca atattatgta accttttttc ctatgaagtt tttgtaggt cctgttgtga actaattag gatgagtttc tatgttgtat attaaagtta cattatgtgt aacagattga tttctcagc acaaaataaa aagcatctgt attaatgtaa agatactag aataaaacct tcaaggtttt	Homo sapiens
			MLTRLQVLT ALFSKGFLS LGDHNFLRRE IKIEGLVLG GLFPINEKGT GTEECGRINE P DRGIQRLEAM LEAIDEINKD DYLLPGVKLG VHILDTCSRDL TYALEQSLEF VRASLTKVDE AEYMC PDGSY AIQENIPLLI AGVIGGSYSS VSIQVANLLR LFOIPQISYA STSAKLSDKS RYDYFARTVP PDFYQAKAMA EILRFENWTY VSTVASEGDY GETGIEAFEQ EARLRNICIA TAEKVGRSNI RKSYSVIRE LIQPNARV VLFMSDDSR ELIAAASRAN ASFTWVASDG WGAQESIIGK SEHVAIGAIT LELASQVRQ FDRYFQSLNP YNNHRNPWF DFWEQKFQCS LQNRNHRV CDKHLAIDSS NYEQESKIMF VNAVYAMAH ALHKMQLTLC PNTTKLCDAM KILDGKKLYK DYLLKINETA PENPNKDADS IVKFDTEGDG MGRYVNFQ NVGKYSYLK VGHWAETLSL DVNSIHWSRN SVPTSQCSDP CAPNEMKNMQ PGDVCCWICI PCPEYELAD EFTCMDCGSG QWPTADLTGC YDLPEDYIRW EDAWAIGPVT IACLGFMCTC MVTVFIKHN NTPLVKASGR ELCYILLFGV GLSYCMTEFF IAKPSVICA LRLGLGSSE AICYSALLTK TNCIARIFDG VKNGAQRPF ISPSQVFIC LGLILVILCT VYAFTRKCP ENFNEAKFIG FTMYTTCIHW RETVLKCNV KDSSMLISLT YDVILVILCT VYAFTRKCP ENFNEAKFIG FTMYTTCIHW LAFLPIFYVT SSDYRVQTT MCISVLSGF VVLGCLFAPK VHILFQPK NVVTHRLHLN REFSVSGTGT YSQSSASTYV PTVCNGREVL DSTTSSL	
175	3096	Metabotropic NM_000841 Glutamate Receptor 4	ccgagtgaca aggaggtggg agagggtagc agcatgggt acgcggttg ctgcccctcag A tcccctgt gctgaagctg ccctgcccac gccaccacag gccgtggggc caggggcctg ccagggttag gagtgggctt gccgttcacg ggtctctagg gattcccgag atgcctggga agagaggctt gggctgggtg tgggcccggc tggccctttg cctgtctctc agcctttacg gccctggat gccttctcc ctgggaaagc ccaaggcca cctcacatg aattccatcc gcatagatgg ggacatcaca ctgggaggcc tgttcccggt gcagggccgg ggctcagagg gcaagccctg tggagaactt aagaaggaaa agggcatcca ccggtggag gccatgtgt tcgcccctga tcgcatcaac aacgaccgg accgtctgccc taacatcacg ctgggccc gcattctgga cacctgctcc agggacacc atgcccctga gcagtcgctg acctttgtgc aggcgtcat cgagaaggat ggacagagg tccgtgtgtg cagtggcggc ccaccatca tcaccaagcc tgaacgtgtg tgggtgtgca tgggtgttc agggagctcg gtctccatca tggtggccaa catccttcgc ctcttcaaga taccacagat cagctacgcc tccacagcgc cagacctgag tgacaaacgc cgctacgact tcttctccc cgtgggtgcc tcggacacgt accaggccca ggcctggtg gacatgctc gtgcccctcaa gtggaactat gtgtccacag	Homo sapiens

tggcctcgga ggcagctat ggtgagagcg gtgtggaggg cttcatccag aagtcocgtg
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176	3096	Metabotropic NP_000832.1 Glutamate Receptor 4	<p>cacctttcc ctctctggcg tccccggctg cttgtactct tggccttttc tgtgtctcct tcttggtct tgcctcgcc tctctctctc atcctctttg tctcagctc ctctgcttt cttggtccc accagtgtca cttttctgcc gttttctttc ctgttctcct ctgcttcatt ctcgtccagc cattgctccc ctctccctgc caccctccc cagttcacca aaccttacat gttgcaaaa agaaaaaagg aaaaaaatc aaaaacaaa aaagccaaaa cgaacaaaa tctcagagt gtgccaagt gctgctcct cctgtggcc tctgtgtgtg tccctgtggc ccgcagcctg ccgcctgcc ccgcccctc gccgtgtgc ttgcccgcct gcccgcccg tctgcgtct gtcttgccc cctgcccgc gcccctcct gccgaccaca cggagttcag tgccctgggtg ttgtgtgat gttattgacg acaatgtga gcgcatgatt gttttatc caagaacatt tctaataaaa ataaacacat ggttttgcaa aaaa</p>	<p>MPGKRGIGWW WARLPLCLLL SLYGPWMPSS LGKPKGHPHM NSIRIDGIT LGGLFPVHGR P GSEKPCGEL KKEKGIHRL AMIFALDRIN NDPDLLPNIT LGARILDTC RDTHALEQSL TFVQALIEKD GTEVRCGSGG PPIITKPERV VGVIGASGS VSIMVANILR LFKIPQISYA STAPDLSDNS RYDFFSRVVP SDTYQAQAMV DIVRALKWNV VSTVASEGS GESGVEAFIQ KSREDGGVCI AQSVKIPREP KAGEFDKIIR RLETSNARA VIIFANEDDI RRVLEAARRA NQTHGFEWNG SDSWGSKIAP VHLIEVAEG AVTILPKRMS VRGFDRYFSS RTLDNNRRNI WFAEFWEDNF HCKLSRHALK KGSHVKKCTN RERIGQDSAY EQEGKVQFVI DAVYAMGHAL HAMHRDLCPG RVGLCPRM DP VDGTLQLLKYI RNVNFSGIAG NPVTFNENG APGRYDIYQY QLRNDSAEYK VIGSWTDHLH LRERMHWPG SQQLPRISIC SLPCQPGERK KTVKGMPPCCW HCEPCTGYQY QVDRYTCKTC PYDMRPTENR TGCRRPIIK LEWGSFWAVL PLFLAVVIGIA ATLFVITFV RYNDTPIVKA SGRELSVLL AGIFLCYAT FMIAEPDLG TCSLRIFLG LGMSISYAAL LTKTNRIYRI FEQKRSVSA PRFISPAQL AITFSLISLQ LLGICVWFV DPSSHVVDFQ DQRTLDPRFA RGVLKCDISD LSILCLLGS MLIMVTCTVY AIKTRGVPEP FNEAKPIGFT MYTTCIVWLA FIPIFFGTSQ SADKLYIQTT TITVSVLSA SVSLGMLYMP KVYIILFHEPE QNVPKRKRSL KAVVTAATMS NKFTQKGNFR PNGEAKSELC ENLEAPALAT KQTYVTYNH AI</p>	Homo sapiens
177	3097	Metabotropic NM_000842 Glutamate Receptor 5	<p>acaaaatggt cctttagaaa atacatctga attgctggct aatttcttga ttgagactc A aacgtaggac atcgcttgtt cgtagctatc agaaccctcc tgaattttcc ccaccatgct atctttattg gcttgaactc ctttccctaaa atggtccttc tgttgatcct gtcagtctta cttttgaag aagatgtccg tgggagtga cagtcctcag agaggagggt ggtggctcac atgccgggtg acatcattat tggagctctc ttttctgttc atcaccagcc tactgtggac aaagtccatg agaggaagtg tggggcggtc cgtgaacagt atggcattca gagagtggag gccatgctgc ataccctgga aggatcaat tcagacccca cactcttgcc caacatcaca ctgggctgtg agataaggga ctctgctggtg cattcggtg tggccctaga gcagagcatt gagttcataa gagattccct catttctca gaagaggaag aagccttggt acgctgtgtg gatggctcct cctcttccct ccgctccaag aagcccatag taggggtcat tgggcctggc tccagttctg tagccattca ggtccagaat ttgctccagc ttttcaaat acctcagatt gcttactcag caaccagcat ggtctgagt gacaagactc tgttcaata tttcatgagg gttgtgcctt cagatgctca gcaggcaagg gccatggtg acatagtga gaggtacaac tggacctatg tatcagccgt gcacacagaa ggcaactatg gagaaagtgg gatggaagcc ttcaaaagata tgtcagcgaa ggaagggtt tgcatcgccc actcttaca aatctacagt</p>	<p>Metabotropic NP_000832.1 Glutamate Receptor 4</p>	Homo sapiens

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179	3098	Metabotropic Glutamate Receptor 6	NM_000843	cgaggcccg ggcaggccg ctgagctaac tcccagagc caaagtggaa ggcgccccc	A	Homo sapiens
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180	3098	Metabotropic NP_000834.1 Glutamate Receptor 6	cc	tgggcctctc tggcaggaac tctgatgcac cgcgaggccc atgtactcct gtggctttct	Homo sapiens
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181	3099	Metabotropic NM_000844 Glutamate Receptor 7	A	atcctctgtt actgaagatg ttgtcatatt tagtaccttc acaaggtttc tctccttcca	Homo sapiens
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				cttatccttt ttgctcttta gaaatttccc ttttaatttat tacattcatt gcttactgta	
				aagagtccag gtaactgact ttaattcaag ttacttctg ttaataaaat ttaacttttc	
				cc	
				5' LKVALPLAW LAQAGLARA GSVRLAGGLT LGGLFPVHAR GAAGRACGPL P	
				KKEQGVHRL EAMLYALDRVN ADPELLPGVR LGARLLDTCS RDTYALEQAL SFVQALIRGR	
				GDGDEVGVR PGVPPLRPA PPERVAVVG ASASSVSIMV ANVLRIFAIP QISYASTAPE	
				LSDSRYDF SRVPPDSYQ AQAMVDIVRA LGWNYVSTLA SEGNYGESGV EAFVQISREA	
				GGVCIAQSIK IPREPKEEF SKVIRRLMET PNARGIIIFA NEDDIRRVLE AARQANLTGH	
				FLWVGSDWG AKTSPILSLE DVAVGAITIL PKRASIDGFD QYFMTSRLEN NRRNIWFAEF	
				WEENFNCKLT SSGTQSDST RKCTGEERIG RDSTYEQEGK VQFVIDAVYA IAHALHSMHQ	
				ALCPGHTGLC PAMEPTDGRM LLOXIRAVRF NGSAGTPVME NENGDAAGRY DIFOQATNG	
				SASSGGYQAV GQWAETLRD VEALQWSGDP HEVPSSLCSL PCGPGERKKM VKGVPCWHC	
				EACDGYRFQV DEFTCEACPG DMRPTNHTG CRPTFVVRSL WSSPWAAPPL LLAVLGIVAT	
				TTVATFVRY NNTPIVRASG RELSYVLLTG IFLIYAITFL MVAEPGAAVC AARRLFGLG	
				TTLSSALLT KTNRIYRIFE QGKRSTVPPP FISPTSQVLI TFSLSLQV GMIAWLGARP	
				PHSVIDYEEQ RTVDPEQARG VLKCDMSDLS LIGCLGYSLL LMVTCTVYAI KARGVPETFN	
				EAKPIGFTMY TTCIIWLAFV PIFGTAQSA EKIIYIQTTL TVSLSLASV SLGMLYVPKT	
				YVILFHEQN VQKRKRLKA TSTVAAPPGK EDAEAHK	
				gaattcccaa caccaggta atttttctat ttttagtaga gattgggttt caccatgttg A	
				gccaggatgg tctccatctc ttgacctcgg gatcctcctg gcttggcttc caaagtgct	
				gggattacag gcatgagtca ccataccag ccaactgcag tcattcttat ggggcaacaa	
				cttgggtgaa cccaggtttt ctaagatac aaacctatgg gcaacaccaa gcatttctaat	
				ggaataggca cctggctgac tccaggcatt ctaataaatag agacacctgg gcgaactcag	

acggtcgccc ctccccggat tccccaccc tcctgctctg caggagcccc tgggtcttcc
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ccgcgcgcgc caccgcagca gccggagcag catggtccag ctgaggaagc tgctccgcgt
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ggcggcgcg cgcaggaga tgtacgcccc gcactcaatc cggatcgagg gggacgtcac
cctcgggggg ctgttcccc tgcaagccaa ggtccccagc ggaagtccct gcggcgacat
caagagggaa aacgggatcc acaggctgga agcgatgctc tacgccccg accagatcaa
cagtgatecc aacctactgc ccaacgtgac gctggcgcg cgtatcctgg acacttgttc
caggacact tacgcgctcg aacagtcgct tactttctc caggcgctca tccagaaggga
cacctccgac gtgcgctgca ccaacggcga accgcgggtt ttcgtcaagc cggagaagt
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gctcttccag atccccaga ttagttagtc atcaacggca ccgagctaa gtgatgaccg
gcgctatgac ttcttctctc gcgtggtgcc acccgattcc ttccaaagccc aggccatggt
agacattgta aaggccctag gctggaatta tgtgtctacc ctcgcacggt aaggaagtta
tggagagaaa ggtgtggagt ccttcacgca gatttccaa gaggcaggtg gactctgcat
tgcccagtc gtgagaatcc ccaggaacg caaagacagg accattgact ttgatagaat
tatcaaacag ctctggaca ccccaactc cagggcgctc gtgattttg ccaacgatga
ggatataag cagatccttg cagcagccaa aagagctgac caagtggcc atttctttg
ggtgggatca gacagctggg gatccaaaat aaaccactg caccagcatg aagatatgc
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tacgtcccg acacttgaaa acaacagaa gtaagttagg ttgcccgaat actggaggga
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cgtgattgac gcagtctatg ctatggctca cgccttcac cacatgaaca agtatctctg
tgctgactac cggggtgtct gccagagat ggagcaagct ggaggcaaga agttgctgaa
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cggggatgca cctgggcgtt atgacatctt tcagtaccag accacaaaca ccagcaaccc
gggttacgt ctgatcgggc agtgacaga cgaacttcag ctcaatatag aagacatgca
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acagagaaaag aagacacaga aagaaactcc ttgctgttgg acctgtgagc ctgcgatgg
ttaccagtac cagttagtg agatgacatg ccagcattgc cctatgacc agaggcccaa
tgaaaaatcga accggatgcc agtatattcc catcatcaa ctggagtgcc actccccctg
ggctgtgatt cctgtcttcc tggcaatgtt ggggatcatt gccaccatct ttgtcatggc
cactttcacc cgctacaatg acacgcccac ttcttggcta catcatcact tctggcggg aactcagta
tgttcttttg acgggcatct ttcttggcta catcatcact ttcttggc ttgggtatgt gcatcagtta
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tgagccctc ttgacgaaaa caatcggat ttatgcata ttgagcagg gcaagaatc
agtaacagct ccagactca taagcccaac atcaaaactg gcaatcactt ccagtttaat
atcagttcag cttctagggg tttctatttg gtttgggtt gatccacca acatcatcat
agactacgat gaacacaaga caatgaaccc tgagcaagcc agagggttc tcaagtgtga
cattacagat ctccaaatca ttgtctctt ggatatagc atttcttca tggtcacatg

182	3099	Metabotropic NP_000835.1 Glutamate Receptor 7	tactgtgtat gccatcaaga ctcggggtgt acccgagaat ttaacgaag ccaagcccat tgattcact atgtacacga catgtatagt atggcttgcc ttcattccaa tttttttgg caccgtcaa tcagcggaag agctctacat acaactacc acgttacaa tctccatgaa cctaagtga tcagtggcg tgggatgct atacatgcg aaagtgtaca tcatcattt ccacctgaa ctcaatgtcc agaaacgga gcgaagcttc aaggcggtag tcacagcagc caccatgtca tcgaggctgt cacacaaacc cagtgacaga ccaacgggtg agcaaaagac cgagctctgt gaaaacgtag accaaacag ccctgctga aaaaagaagt atgtcagtta taataacctg gttatctaac ctgttcatt ccatggaacc atggaggagg aagacctca gttatttgt caccacact ggcataggac tcttggtcc taccgcttc ccatcaccgg aggagcttcc cggccggga gaccagtgt agaggatcca agcacctaa acagtgtctt tatgaaatat ccttacttta tctgggctta ataagtcact gacatcagca ctgcaactt ggctgcaatt gtggacctc cctaccacag ggagtgtga aactcaagtc cgcgccggc tctttagaat ggaccactga gagcacagg accgttttgg ggctgacctg tcttattacg tatgtacttc taggttgcaa ggttttgaaa tttctgtac agttgtgag gaccttgcg ctttgccatc tgatgtcgta cctcggttca ctgtttgtt tcgaatgcct tgtttcata gagccctatt ctctcagacg gtggaatatt tggaaaaatt taaaacaat taaatttta aagcaatctt ggcagactaa acaagatata tctgtacatg actgtataat tacgattata gtaccactgc acatcatgtt tttttttttt aagacaaaaa agatgtttta agacaaaaa ctgtgtgag aagtatgct ccactatct ttggtatatg ataggttaca taaaagggaag gtattggctg aactgaatag aggtcttgat ctttggaatg catgccagta atgtatttta cagtacatgt ttattatgtt caatatgtt atttgtgttc tcttttgta ttttaatta gggtatatga atattttgca ataattttaa taattattaa gctgtttgaa ggaagaata tggatttttc atgtcttgag gttttgttca tgcaccttt gactgatcag tgtataagg actttaggaa aaaaagcatg tatgttttt actgttttga ataatgactt tegttaactt tgctgcttat gtgccaattt agtgaaaaa acaacacctt gctgaaaaat tccctcttc cattctctt caattctgt atattgtcca agaattgata aataaggaat tc MVQLRKLRLV LTLMKFPCCV LEVLICALAA AARGQEMYAP HSIRIEGDVT LGGLFPVHAK P GPSGVPCGDI KRENGIHRLE AMLYALDQIN SDPNLLPNVT LGARILDTC RDTYALEQSL TFVQALIQKD TSDVRCNTE PPVFKPEKV PDSFOAQMV DIVKALGWNY VSTLASEGSY GEKVESFTQ STAPELSDDR RYDFFSRVVP PDSFOAQMV DIVKALGWNY VSTLASEGSY GEKVESFTQ ISKEAGGLCI AQSVRIPQER KDRTIDFDRI IKQLLDPNS RAVVIFANDE DIKQILAAK RADQVGHFLW VGSDSWGSKI NPLHEDIA EGATIQPKR ATVEGFDAYF TSRTLENNRR NVWFAEYWE NFNCKLTISG SKKEDTRKC TGQERIGKDS NYEQEGKVQF VIDAVYAMAH ALHHMNKDL C ADYRGVCPEM EQAGGKLLK YIRNVNFGS AGTPVMENKN GDAPGRYDIF QYQTTNTSNP GYRLIGQWTD ELQNIEDMQ WKGKVREIPA SVCTLPCKPG QRKKTQKGT CCWTCEPCDG YQYQFDEMT C QHCPYDQPN ENRTGCCDIP IIKLEWHSPW AVIPVELAML GIATIFVMA TFIRYNDTPI VRASGRELSY VLLTGIFLCY IITFLMIAP DVAVCSFRV FLGLGMCISY AALLTKTNRI YRIFEGKKS VTAPRLISPT SQLAITSSLI SVQLLGVFIW FGVDPNNIII DYDEHKTMNP EQARGVLKCD ITDLQIICSL GYSILLMVT TTYAIAKTRGV PENFNEAKPI GFTMYTTCIV WLAFTPIFFG TAQSAEKLYI QTTTLTISMN LSASVALGML YMPKVYIIIF HPFLNVQKRK RSFKAUVVTA TMSSRLSHKP SDRPNGEAKT ELCENVDPNS	Homo sapiens
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183	3100	Metabotropic Glutamate Receptor 8	PAKKYVSY NNIVI	Homo sapiens
			tgctgtgttg caagaataaa ctttgggtct tgattgcaa taccacctgt ggagaaaaatg	A
			gtatgcgagg gaaagcgatc agcctcttgc ccttgtttct tcctcttgac cgccaagtctc	
			tactggatcc tcacaatgat gcaagaact cacagccagg agtatgccc ttccatacgg	
			gtggatgggg acattatttt ggggggtctc ttccctgtcc acgcaagggg agagagaggg	
			gtgccttgtg gggagctgaa gaagaaaaag gggattcaca gactggaggc catgctttat	
			gcaattgacc agattaacaa ggaccctgat ctcctttcca acatcactct ggggtgccgc	
			atcctcgaca cgtgctctag ggacacctat gctttggagc agtctctaac attcgtgcag	
			gcattaatag agaaagatgc ttcggtgtg aagtgtgcta atggagatcc accattttc	
			accaagcccg acaagatttc tggcgtcata ggtgctgcag caagctccgt gtccatcatg	
			gttgctaaca ttttaagact ttttaagata cctcaaatca gctatgcac cagagcccca	
			gagctaagtg ataacaccag gtatgacttt ttctctcgag tggttccgcc tgactcctac	
			caagcccaag ccatggtgga catcgtgaca gcaactgggat ggaattatgt ttcgacactg	
			gcttctgagg ggaactatgg tgagagcgggt gtggaggcct tcaccagat ctcgaggggag	
			attggtggtg tttgcattgc tcagtcacag aaaatccac gtgaaccaag acctggagaa	
			tttgaaaaaa ttatcaaacg cctgctagaa acactaatg ctcgagcagt gattatgttt	
			gccaatgagg atgacatcag gaggatattg gaagcagcaa aaaaactaaa ccaagtggg	
			cattttctct ggattggctc agatagtgg ggatccaaaa tagcacctgt ctatcagcaa	
			gaggagattg cagaaggggc tgtgcaaat ttgcccaaac gagcatcaat tgatggattt	
			gacgatact ttagaagccg aactcttgcc aataactgaa gaaatgtgtg gtttgcagaa	
			ttctgggagg agaatttttg ctgcaagtta ggaacacatg ggaagaaggaa cagtcatata	
			aagaaatgca cagggtgga gcgaattgct cgggattcat ctatgaaca ggaaggaaaag	
			gtccaaattg taattgatgc tgtatatcc atggcttac ccttgacaa tatgcacaaa	
			gactctgcc ctggatacat tggcctttgt ccacgaatga gtaccattga tgggaaaagag	
			ctacttggtt atattcgggc tgtaaatttt aatggcagt ctggcactcc tgtcactttt	
			aatgaaaaac gagatgcttc tggacgttat gatatcttc agtatcaaat aaccaacaaa	
			agcacagagt acaaagtcac cggccactgg accaatcagc ttcatctaaa agtggaaagac	
			atgcagtggg ctcatagaga acatactcac cggcgtctg tctgcagcct gccgtgtaag	
			ccaggggaga ggaagaaaac ggtgaaaggg gtcccttgtc gtctggcactg tgaacgctgt	
			gaaggttaca actaccaggt ggatgagctg tctgtgaac ttgcccctct ggatcagaga	
			cccaacatga accgcacagg ctgccagctt atccccatca tcaaatgtga gtggcattct	
			ccctggggctg tgggtccctgt gttgttgca atattgggaa tcatgccac cacctttgtg	
			atcgtgacct ttgtccgcta taatgacaca cctatcgtga gggcttcagg acgcgaactt	
			agttacgtgc tctaacggg gattttctc tgtattcaa tcaagtttt aatgattga	
			gcaccagata caatcatatg ctcctccga cgggtcttcc taggacttgg catgtgtttc	
			agctatgcag ccttctgac caaaacaaac cgtatccacc gaatattga gcaggggaag	
			aaatctgtca cagcgcacaa gttcattagt ccagcatctc agctggtgat caccttcagc	
			ctcatctccg tccagctcct tggagtgttt gtctggtttg ttgtggatcc cccccacatc	
			atcattgact atggagagca gcggacacta gatccagaga aggccagggg agtgctcaag	
			tgtgacattt ctgatctctc actcatttgt tcaattggat acagtatcct ctgtatggtc	

181/448

184	3100	Metabotropic NP_000836.1 Glutamate Receptor 8	actgttactg tttatgcaa taaacagaga ggtgtccag agactttcaa tgaagccaaa cctattggat ttaccatgta taccactgc atcatttggg tagctttcat ccccatctt tttggtagc cccagtcagc agaaagatg tacatccaga caacaacact tactgtctcc atgagtttaa gtgcttcagt atctctggc atgctctata tgcccaagggt ttattattata atctttcatc cagaacagaa tgttcaaaaa actgatccaa aaggaaatg acagacaaa tggcgagggtg gctgccacca tgcaaaagcaa actgatccaa aactttcct ctaccaagac aacatatatc aaaagtgaac tctgtgagag tcttgaacc aacacttctt aatctgaaga gacgtgggtat agttacagca atcattcaat ctgaaacagg gaaatggcac aatctgaaga gacgtgggtat atgatcttaa atgatgaaca tgagaccgca aaatttcact cctggagatc tccgtagact acaatcaatc aaatcaatag tcagtcttgt aaggacaaa aattagccat gagccaaaag tatcaataaa cggggagtga agaaaccgt tttatacaat aaaccaatg agtgtcaagc taaagtattg cttattcatg agcagttaaa acaaatcaca aaggaaaaa taatgttagc tcgtgaaaaa aatgctgttg aaataataa tgtctgatgt tattcttcta ttttctgtg attgtgagaa ctccgttcc tgtccacat tgtttaactt gtataagaca atgagtctgt ttcttgtaat ggtgaccag attgaagccc tgggttctgc taaaaataa tgcaatgatt gatgatgca atttttata caataaattt atttctaata ataaaggaat gtttgcgaaa aaaaaaaaa aaaaactcga g	Homo sapiens
185	3212	Opioid mu-type Receptor	ggaattccgg ctataggcag aggagaatgt cagatgctca gctcgtctcc ctccgcctga A cgctcctctc tgtctcagcc agactgggt tctgtaagaa acagcaggag ctgtggcagc ggcgaagga agcggctgag gcgcttgaa cccgaaagt ctcggtgctc ctggctacct cgacacagg tgcgcgccg gccgtcagta ccatggacag cagcgtgccc cccacgaacg ccagcaattg cactgatgcc ttggcgctact caagtgtctc cccagacccc agccccggtt cctgggtcaa cttgtccac ttagatggca acctgtccga ccatgctggt ccgaaccgca ccaacctggg cgggagagac agcctgtgcc ctccgaccgg cagtcctccc atgatcacg ccatcacgat catggccctc tactccatcg tgtgcgtggt ggggctcttc ggaacttcc	Homo sapiens

186	3212	Opioid mu- type Receptor	NP_000905.1	MDSSAAPTNA PTGSPSMITA STLPFQSVNY RTPRNNAKIIN FAFIMPVLII YVTIKALVTI EQQNSTRIRQ	SNCTDALAYS ITIMALYSIV LMGTWPFGTI VCNWLILSSAI TVCYGLMLLR PETTFQVSW NTRDHPSTAN	SCSPAPSPGS CWGLFGNFI LCKIVISIDY GLPVMFMATT LKSVRMLSGS HFCIALGYTN TVDRTNHQLE	WVNLSHLDGN VMYVIVRYTK YNMFTSIFTL KYPQGSIDCT KEKDRNLRI SCINPVLVAF NLEAETAPLP	LSDPCGPNRT MKTATNIYIF CTMSVDRYIA LTFSHPTWYW TRMVLVVAV LDENFKRCFR EFCIPTSSNI	NLGGRDSLCP NLALADALAT VCHPVKALDF ENLVKICVEI FIVCWTPHIH FIVCWTPHIH FIVCWTPHIH	Homo sapiens
187	3223	Muscarinic acetylcholin e Receptor M1	NM_000738	atgaacactt gggtccctggc acagggaacc aactacttcc ctctatacca	cagcccacc aagtggcctt tgctgttact tgctgtgact cgtaacctgt	tgctgtcagc catgggac catctcttc ggcctgtgct catgggcccac	cccaacatca accacgggcc aaggtcaaca gacctcatca tggtgtctgg	ccgtctctggc tcctgtctgct cggagctcaa tcggtaacct gcacgtggc	accaggaaag agccacagt gacagtcaat ctccatgaac ttgtgacctc	Homo sapiens

188	3223	Muscarinic acetylcholin e Receptor M1	NP_000729.1	<p> tggctggccc tggactatgt ggcagcaat gcctccgta tgaatctgt gctcatcagc tttgaccgct acttctccgt gactcgccc ctgagctacc gtgccaagcg cacacccgc cggcagctc tgatgacgg cctggcctgg ctggttctct ttgtgctctg ggccccagcc atcctctctt ggcagtaact gtaggggag cggacgatgc tagctggga gtgtacatc cagttcctct ccagcccat catcacctt ggcacagcca tggctgcct ctacctcct gtcacagtca tgtcacgct ctactggcg atctaccgg agacagagaa ccgagcacgg gagctggcag cccttcagg ctcgagacg ccaggcaag ggggtggcag cagcagcagc tcagagaggt ctacagcagg ggtgagggc tcaccagaga ctctccagg ccgtgctgt cgctgctgcc ggccccccag gctgctgag cctacacatc tcagagggag agaggaaag gacgaaggct ccattggagc cctcacatcc tcagagggag aggagcctgg ctccgaagt gtgatcaaga tgccaatggt ggaccccgag gcacaggccc ccaccaagca gccccacgg agtcceccaa atacagtcaa gaggccgact agaaaaggc gtgatcgagc tggcaagggc cagaagcccc gtggaagga gcagctggc aagcggaaga cctctcgtc ggtcaaggag aagaaggcgg ctggaccct gctgacctc tgcaaggact gtgtcccgga gacctgtgg tacaacatca tggctgctgt gtcaccttc tgcaaggact gtgtcccgga gacctgtgg gagctggggt actggctgtg ctacgtcaac agcaccatga acccatgtg ctacgcactc tgcaacaaag ccttcggga cactctgcg ctgctgctgc ttgcccgtg ggcaagaga cgctggcgca agatcccaa ggcctctggc tccgtgcacc gcactccctc ccgccaatgc tga </p>	Homo sapiens
189	3224	Muscarinic acetylcholin e Receptor M2	NM_000739	<p> MNTSAPPAVS PNITVIAPGK GPQVAFIGI TTGLLSLATV TGNLLVLISF KVNTLKTVN P NYFLLSLACA DLIIGTFSMN LYTYLLMGH WALGTIACDL WLALDYVASN ASVMNLLIS FDRYFSVTRP LSYRAKTRPR RAALMIGLAW LVSEFLWAPA ILFWQYLUGE RTMLAGQCYI QFLSQPIIF GTAMAAFYLP VTVMCTLYWR IYRETEENRAR ELAALQGSSET PGKGGSSSS SERSQPGAG SPETPPGRCC RCCRAPRLQ AYSWKEEEE DEGSMESLTS SEGEPPGSEV VIKMPMDPE AQAPTQPPR SSPNTVKRPT KGRDRAGKG QKPRGKEQLA KRKTFSLVKE KKAARTLSAI LLAFILTWP YNIMVLVSTF CKDCVPETLW ELGYWLCYN STINPMCYAL CNKAFRDTR LLLLCRWDR RWRKIPKRP SVHRTPSRQC atgaataact caacaaactc ctctaacaat agcctggctc ttacaagtc ttataagaca A tttgaagtgg tgtttattgt cctgtggct ggatccctca gtttggtag cattatcggg aacatccctag tcatgggttc cattaaagtc aaccgccacc tccagaccgt caacaattac ttttattca gcttggcctg tctgacctt atcataggtg ttttctccat gaacttgtac accctctaca ctgtgattgg ttactggcct ttgggacctg ttggtgtga cctttggcta gccctggact atgtggctcag caatgcctca gttatgaatc tgctcatcat cagctttgac aggtaactct gtgtcacaaa acctctgacc taccagtca agcgaccac aaaaatggca ggtatgatga ttgcagctgc ctgggtcctc tcttctacc tctgggctcc agccattctc ttctggcagt tcatgtagg ggtgagaact gtggaggatg gggagtgtca cattcagttt ttttccaatg ctgctgtcac ctttggtagc gctattgcag cctctattt gccagtgtc atcatgactg tgctatatgg gcacatatcc cgagccagca agagcaggat aaagaaggac aagaaggagc ctgttgccaa ccaagacccc gtttctcaa gtctgttaca aggaaggata gtgaagccaa acaataacaa catgcccagc agtgacgatg gcctggagca caacaaatc cagaatggca aagccccag ggtcctctgtg actgaaaaact gtgttcaggg agaggagaag </p>	Homo sapiens

190	3224	Muscarinic acetylcholin e Receptor M2	NP_000730.1	<p> gagagctcca atgactccac ctacgtcagt gctgtgcct ctaatatgag agatgatgaa ataaccagg atgaaaacac agtttccact tccctgggcc attccaaaga tgagaactct aagcaaacat gcatcagaat tggcaccag acccaaaa gtgactcatg taccacaact aataccaccg tggaggtagt ggggtcttca ggtcagaatg gagatgaaaa gcagaatatt gtagcccgca agattgtgaa gatgactaag cagctgcaa aaaagaagcc tctccttcc cgggaaaaa aagtcaccag gacaatcttg gctattctgt tggctttcat catcacttgg gcccataca atgtcatggt gctcattaac accttttgg cactttgcat ccccaacact gtgtggacaa ttggttactg gctttgttac atcaacagca ctatcaaccc tgcctgctat gcactttgca atgccacctt caagaagacc ttttaaacacc ttctcatgtg tcattataag aacataggcg ctacaaggta a MNNSNTSSNN SLALTSPYKT FEWVFIVLVA GSLSLVTIIG NILVMVSIKV NRHLQTVNNY P FLFLACADL IIGVFSMNLV TLYTVIGYWP LGPVVCIDLWL ALDYVVSNAS VMNLLIISFD RYFCVTKPLT YPVKRTTKMA GMIAAAWVL SFILWAPAIL FWQFIVGVRT VEDGECYIQF FSNAAVTFTG AIAAFYLPVI IMTVLYWHIS RASKSRIKKD KKEPVANQDP VSPSLVQGRI VKPNNNMPS SDDGLEHNI QNGKAPRDPV TENCVOGEEK ESSNDSTSVS AVASNMRRDDE ITQDENTVST SLGHSKDENS KQTCIRIGTK TPKSDSCTPT NTTVEVVGSS GONGDEKQNI VARKIVMTK QPAKKKPPPS REKKVTRTIL AILLAFIITW APYNVMVLIN TFCAPCIPNT VWTIGWLCY INSTINPACV ALCNATFKKT FKHLMCHYK NIGATR CCTGGCAGTG CCGATGTTCC GATACTGGCA CAGCAGCAGG TGCCGGAAGG TCTTTTAAA A GGTGGCGTTG CACAGAGCAT AGCAGGCAGG GTTGATGGTG CTGTTGACGT AGCAGAGCCA GTAGCCAATG GACCACACCG GGTCAAGGAT GCAGCTCTGG CAGAAGGTGT TCACCAGGAC CATGACGTTG TGAGCGCTCC CCGTGAGGAT GAAAGCTAAC ANAATGGCAA AGATCGGTCCG TGGCACTTTG CGCTCCCGGG CCCGCATCTG CCGCTTCTTG GCACCTGGG TCGGAGCGAT GCTAGCGAAC TTGCGGGCCA CGTTGGCCGC AGCGGCATGC CAGNCGGCGT GGGAGGGACA ATCTCAGGCG TGGCACACAC TCATGGGCTG GCTGGCTTCG TCAAATTTTG GATCTTGGAC CATCTGGGAG GCTTGGTTGA AGCCCCCGG CTCGGACTTG CGGGCATGAA TCCAGGCCCTT ACTCTANAGG ATCCCCCCCCT CTCC atggccaact tcacacctgt caatggcagc tcgggcaate agtccgtgcg cctgggtcacg A tcatcatccc acaatcgcta tgagacggtg gaaatggtct tcatggccac agtgacaggc tccctgagcc tggtagctgt cgtgggcaac atcctgttga tgctgtccat caaggtcaac aggcagctgc agacagtcaa caactacttc ctcttcagcc tggcgtgtgc tgatctcatc ataggcgct tctccatgaa cctctacacc gtgtacatca tcaagggcta ctggccccgtg ggcgccgtgg tctgcgacct gtggctggcc ctggactacg tggtagcaa cgcctccgtc atgaaccttc tcatcatcag ctttgaccgc tacttctgag tcaccaagcc tctcacctac cctgcccggc gcaccaccaa gatggcaggc ctcatgattg ctgctgcctg ggtactgtcc ttggtgctct gggcgcctgc catcttgttc tggcagtttg tggtaggtaa gcgacaggtg cccgacaacc actgctcat ccagttcctg tccaaaccag cagtgcctt tggcacagcc attgctgct tctacctgcc tbtggtcatc atgacggtgc tglacatcca catctccctg gccagtgcga gccgagtcca caagaccgg cccgagggcc cgaaggagaa gaaagccaaag acgctggcct tctcaagag cccactaatg aagcagagcg tcaagaagcc ccgcccggga ggccgcccgg gaggactgcg caatggcaag ctggaggagg cccccccg ccgctgtgcca </p>	Homo sapiens
191	3226	Muscarinic acetylcholin e Receptor M4	LG1143	<p> CCTGGCAGTG CCGATGTTCC GATACTGGCA CAGCAGCAGG TGCCGGAAGG TCTTTTAAA A GGTGGCGTTG CACAGAGCAT AGCAGGCAGG GTTGATGGTG CTGTTGACGT AGCAGAGCCA GTAGCCAATG GACCACACCG GGTCAAGGAT GCAGCTCTGG CAGAAGGTGT TCACCAGGAC CATGACGTTG TGAGCGCTCC CCGTGAGGAT GAAAGCTAAC ANAATGGCAA AGATCGGTCCG TGGCACTTTG CGCTCCCGGG CCCGCATCTG CCGCTTCTTG GCACCTGGG TCGGAGCGAT GCTAGCGAAC TTGCGGGCCA CGTTGGCCGC AGCGGCATGC CAGNCGGCGT GGGAGGGACA ATCTCAGGCG TGGCACACAC TCATGGGCTG GCTGGCTTCG TCAAATTTTG GATCTTGGAC CATCTGGGAG GCTTGGTTGA AGCCCCCGG CTCGGACTTG CGGGCATGAA TCCAGGCCCTT ACTCTANAGG ATCCCCCCCCT CTCC atggccaact tcacacctgt caatggcagc tcgggcaate agtccgtgcg cctgggtcacg A tcatcatccc acaatcgcta tgagacggtg gaaatggtct tcatggccac agtgacaggc tccctgagcc tggtagctgt cgtgggcaac atcctgttga tgctgtccat caaggtcaac aggcagctgc agacagtcaa caactacttc ctcttcagcc tggcgtgtgc tgatctcatc ataggcgct tctccatgaa cctctacacc gtgtacatca tcaagggcta ctggccccgtg ggcgccgtgg tctgcgacct gtggctggcc ctggactacg tggtagcaa cgcctccgtc atgaaccttc tcatcatcag ctttgaccgc tacttctgag tcaccaagcc tctcacctac cctgcccggc gcaccaccaa gatggcaggc ctcatgattg ctgctgcctg ggtactgtcc ttggtgctct gggcgcctgc catcttgttc tggcagtttg tggtaggtaa gcgacaggtg cccgacaacc actgctcat ccagttcctg tccaaaccag cagtgcctt tggcacagcc attgctgct tctacctgcc tbtggtcatc atgacggtgc tglacatcca catctccctg gccagtgcga gccgagtcca caagaccgg cccgagggcc cgaaggagaa gaaagccaaag acgctggcct tctcaagag cccactaatg aagcagagcg tcaagaagcc ccgcccggga ggccgcccgg gaggactgcg caatggcaag ctggaggagg cccccccg ccgctgtgcca </p>	Homo sapiens
192	3226	Muscarinic acetylcholin e Receptor M4	NM_000741	<p> CCTGGCAGTG CCGATGTTCC GATACTGGCA CAGCAGCAGG TGCCGGAAGG TCTTTTAAA A GGTGGCGTTG CACAGAGCAT AGCAGGCAGG GTTGATGGTG CTGTTGACGT AGCAGAGCCA GTAGCCAATG GACCACACCG GGTCAAGGAT GCAGCTCTGG CAGAAGGTGT TCACCAGGAC CATGACGTTG TGAGCGCTCC CCGTGAGGAT GAAAGCTAAC ANAATGGCAA AGATCGGTCCG TGGCACTTTG CGCTCCCGGG CCCGCATCTG CCGCTTCTTG GCACCTGGG TCGGAGCGAT GCTAGCGAAC TTGCGGGCCA CGTTGGCCGC AGCGGCATGC CAGNCGGCGT GGGAGGGACA ATCTCAGGCG TGGCACACAC TCATGGGCTG GCTGGCTTCG TCAAATTTTG GATCTTGGAC CATCTGGGAG GCTTGGTTGA AGCCCCCGG CTCGGACTTG CGGGCATGAA TCCAGGCCCTT ACTCTANAGG ATCCCCCCCCT CTCC atggccaact tcacacctgt caatggcagc tcgggcaate agtccgtgcg cctgggtcacg A tcatcatccc acaatcgcta tgagacggtg gaaatggtct tcatggccac agtgacaggc tccctgagcc tggtagctgt cgtgggcaac atcctgttga tgctgtccat caaggtcaac aggcagctgc agacagtcaa caactacttc ctcttcagcc tggcgtgtgc tgatctcatc ataggcgct tctccatgaa cctctacacc gtgtacatca tcaagggcta ctggccccgtg ggcgccgtgg tctgcgacct gtggctggcc ctggactacg tggtagcaa cgcctccgtc atgaaccttc tcatcatcag ctttgaccgc tacttctgag tcaccaagcc tctcacctac cctgcccggc gcaccaccaa gatggcaggc ctcatgattg ctgctgcctg ggtactgtcc ttggtgctct gggcgcctgc catcttgttc tggcagtttg tggtaggtaa gcgacaggtg cccgacaacc actgctcat ccagttcctg tccaaaccag cagtgcctt tggcacagcc attgctgct tctacctgcc tbtggtcatc atgacggtgc tglacatcca catctccctg gccagtgcga gccgagtcca caagaccgg cccgagggcc cgaaggagaa gaaagccaaag acgctggcct tctcaagag cccactaatg aagcagagcg tcaagaagcc ccgcccggga ggccgcccgg gaggactgcg caatggcaag ctggaggagg cccccccg ccgctgtgcca </p>	Homo sapiens

195	3227	Muscarinic Acetylcholin e Receptor M5	NP_036257.1	atggttcctgg tttctacctt ctgtgacaag tgtgtcccag tcacctgtg gcacttgggg tattggttgt gctatgtcaa tagcactgtc aacctatct gctatgccct ctgcaacaga accttcagga agaccttaa gatgtgctt ctctgccgat ggaataagaa aaagtggaa gagaagtgtg actggcaggg gaacagcaag ctacctga MEGDSYHNAT TVNGTPVNHQ PLEHRLWEV ITIAAVTAV SLITIVGNVL VMISFKVNSQ P LKTNNYYLL SLACADLIIG IFSNLYTTY ILMGRWALGS LACDLWLALD YVASNASVMN LLVISFDRYF SITRPLTYRA KRTPKRAGIM IGLAWLISFI LWAPAILCWQ YLVGKRTVPL DECQIQFLSE PTITFGTAIA AFYIPVSVMT ILYCRIYRET EKRTKDLADL QGSDSVTKAE KRKPAHRAIF RSLRCRPRT LAQERNQAS WSSSRSTST TGKPSQATGP SANWAKAEQL TTCSSYPSE DEDKPATDPV LQWYKSQK ESPGEFSAE ETEETFVAE TEKSDYDTPN YLLSPAAHR PKSQCVAHK FRLVVKADGN QETNNGCHKV KIMPCFPVA KEPSTKGLNP NPSEQMTKRK RVVLVKERKA AQTLSAILLA FIITWTPYNI MVLVSTFCDK CVPVTLWHLG YWLQYVNSTV NPICYALCNR TERKTFKMLL LCRWKKKKVE EKLYWQGN SK LP ctattgcagt atctttcagc ttccagtctt atctgaagac cccggcacca aagtgaccag A gagggcagaga agaacttcag aggagtctcg tcttgggctg cccgtgggtg agtgggaggg tcggggactg cagaccgtg gcgatggcca ctctccagc agcagaaacc tggatagacg gggtggagg cgtgggtgca gacgccgtga acctgaccgc ctgcctagt gccggggcgg ccacggggc agtgagact ggtgggtgc aactgctgga ccaagctggc aacctctct cctcccttc cgcgtggga ctgctgtg cagcgtctt ggcgcctgc gcctccag cctggggcca acctaccaa ccagttcgtg cagcgtctt ggcgcctgc gcctggctc ctggcgtatg gtgtggtgtt ggcagtgga gttttggga atctcactgt catctggatc atctggccc acaagcgcat gaggactgtc accaactact tcttgtgaa cctggcttc tccgacgct caatggccc ctccaacag ttggtcaatt tcatctacgc gcttcacagc gagtggtagt ttggcgccaa ctactccgc ttccagaact tcttctctat cacagctgtg ttccgacaga tctactccat gacggccatt gcgtggaca ggtatatggc tattattgat ccttgaaac ccagactgtc tgctacagca accaagattg tcatgggaag tatttggatt ctagcatttc tactgcctt cctcagtg ctttattcca aaaccaaagt catgccaggc cgtactctct gctttgtgca atggccagaa ggtcccaaac aacatttcac ttaccatatt atcgtcatta tactggtgta ctgtttccca ttgctcatca tgggtattac atacaccatt gttggaatta ctctctgggg aggagaaatc ccaggagata cctgtgacaa gtatcatgag cagctaaagg ccaaaagaaa ggtgtgcaaa atgatgatta ttgtgtcat gacattgtct atctgtggc tgccctatca tatttacttc attctcactg caatctatca acaactaat agatggaaat acatccagca ggtctacctg gctagctttt ggctgcaat gagctcaacc atgtacaatc ccatcatcta ctgctgtctg aataaagat ttccagctgg ctccaagaga gcatttcgct ggtgtccttt catcaaaagt tccagctatg atgagctaga gctcaagacc accaggtttc atccaaaccg gcaaaagcagt atgtacaccg tgaccagaat ggagtccatg acagtcgtgt ttgaccccaa cgatgcagac accaccaggt ccagtcggaa gaaaagagca acgccaagag accaaagttt caatggctgc tctgcagga attccaaatc tgcctccgc acttcaagtt tcataagctc accctatacc tctgtggatg aatattctta attccatttc ctgaggtaaa agattagtgt gagaccatca tgggtccagt ctgagacccc attctctat ttatcagctc tgtctatat acctctaga aacagaaagc aatttttagg cagctatggt caaattgaga	Homo sapiens
196	3378	Tachykinin Receptor 3	NM_001059	ctattgcagt atctttcagc ttccagtctt atctgaagac cccggcacca aagtgaccag A gagggcagaga agaacttcag aggagtctcg tcttgggctg cccgtgggtg agtgggaggg tcggggactg cagaccgtg gcgatggcca ctctccagc agcagaaacc tggatagacg gggtggagg cgtgggtgca gacgccgtga acctgaccgc ctgcctagt gccggggcgg ccacggggc agtgagact ggtgggtgc aactgctgga ccaagctggc aacctctct cctcccttc cgcgtggga ctgctgtg cagcgtctt ggcgcctgc gcctccag cctggggcca acctaccaa ccagttcgtg cagcgtctt ggcgcctgc gcctggctc ctggcgtatg gtgtggtgtt ggcagtgga gttttggga atctcactgt catctggatc atctggccc acaagcgcat gaggactgtc accaactact tcttgtgaa cctggcttc tccgacgct caatggccc ctccaacag ttggtcaatt tcatctacgc gcttcacagc gagtggtagt ttggcgccaa ctactccgc ttccagaact tcttctctat cacagctgtg ttccgacaga tctactccat gacggccatt gcgtggaca ggtatatggc tattattgat ccttgaaac ccagactgtc tgctacagca accaagattg tcatgggaag tatttggatt ctagcatttc tactgcctt cctcagtg ctttattcca aaaccaaagt catgccaggc cgtactctct gctttgtgca atggccagaa ggtcccaaac aacatttcac ttaccatatt atcgtcatta tactggtgta ctgtttccca ttgctcatca tgggtattac atacaccatt gttggaatta ctctctgggg aggagaaatc ccaggagata cctgtgacaa gtatcatgag cagctaaagg ccaaaagaaa ggtgtgcaaa atgatgatta ttgtgtcat gacattgtct atctgtggc tgccctatca tatttacttc attctcactg caatctatca acaactaat agatggaaat acatccagca ggtctacctg gctagctttt ggctgcaat gagctcaacc atgtacaatc ccatcatcta ctgctgtctg aataaagat ttccagctgg ctccaagaga gcatttcgct ggtgtccttt catcaaaagt tccagctatg atgagctaga gctcaagacc accaggtttc atccaaaccg gcaaaagcagt atgtacaccg tgaccagaat ggagtccatg acagtcgtgt ttgaccccaa cgatgcagac accaccaggt ccagtcggaa gaaaagagca acgccaagag accaaagttt caatggctgc tctgcagga attccaaatc tgcctccgc acttcaagtt tcataagctc accctatacc tctgtggatg aatattctta attccatttc ctgaggtaaa agattagtgt gagaccatca tgggtccagt ctgagacccc attctctat ttatcagctc tgtctatat acctctaga aacagaaagc aatttttagg cagctatggt caaattgaga	Homo sapiens

197	3378	Tachykinin Receptor 3	NP_001050.1	aaggtagtgt ataaatgtga caaagacact aataacatgt tagcctccac ccaaaataaa atgggcttta aattt MATLPAAETW IDGGGGVGAD AVNLTASLAA GAATGAVETG WLQLLDQAGN LSSSPSALGL P PVASPAPSQ WANLTNQFVQ PSWRIALWSL AYGVVAVAV LGNLIVIWII LAHKRMRTVT NYFLVNLAFS DASMAAFNTL VNFYALHSE WYFGANVCRF QNFFPITAVF ASIYSMTAIA VDRYMAIDP LKPRLSATAT KIVIGSIWIL AFLLAFOQL YSKTKVMPGR TLCFVQWPEG PKQHTYHII VIILVYCFPL LIMGITYTIV GITLWGSELP GFTCDKYHEQ LKAKRKVVKM MIIIVMTFAI CWLPYHIYFI LTAIYQQLNR WKYIQVYLA SFWLAMSSTM YNPIIYCCLN KRFRAGFKRA FRWCPFIKVS SYDELELKT RFHPNRQSSM YTVTRMESMT VVEDPNDADT TRSSRKKRAT PRDPSFNGCS RRMKSASAT SSFISPYTS VDEYS	Homo sapiens
198	3380	Neuromedin B Receptor	NM_002511	gtgctgtgag gcttgccgc ggacagtaaa cttgcagggg cgagaggag ggacatcgat A taaacctaaa tcgtgggcgt tcagtcctca gggcaccgag cgcgtgaaaa ctccagcga ctctgctgga aaggagatca tgccctctaa gtctcttcc aacctctcg tgaccaccgg cggaatgag agcggttccg tccccagggt gtggaaaagg gatttccgc cgccctcgga cgggaccacc acggagttgg tgatccgctg tgtgatcccg tccctctacc tgcctcatcat caccgtgggc ttgctgggca acatcatgct ggtgaagatc ttcatacca acagcgccat gaggagcgtc cccaacatct tcatctctaa cctggcgcc gggacttgc tgcgtgctgt cacctgcgtc ccggtggag cctgcgcgta cttcttcgac gagggatgt ttggcaaggt gggtgcaaa ctgataccctg tcatccagct cacttccgtg ggggttccg tgttcaact cactgccctc agcgccgaca ggtacagagc catcgttaac cccatggaca tgcagacgtc aggggcattg ctgcggacct gtgtgaaggc catgggtatc tgggtggct cgcgtgtgct ggcagttccc gaagcgggtg tttcagaagt ggctgcgcat agtagcttg ataatagcag cttcacagca tgtatcccat accctcaaac agatgaatta catccaaaga ttcattcagt gctcatttct ttggtctatt tctcatacc acttgcatt attagcatt attattatca tattgcaaa accttaatta aaagcgaca caatcttct ggagaataca atgaacatac caaaaaacag atggaaacac ggaacgcct ggctaaaatt gtgcttgcct ttgtgggctg tttcatcttc tgttggttc caaacacat cctttacatg tatcgggtct tcaactataa tgagattgat ccatctctag gccacatgat tgcacctta gttgcccggt tctcagttt tggcaattct tgtgtcaacc catttgcct ttactactc agtgaaagct tcaggaggca tttcaacagc caactctgct gtggaggaa gtccatatca gagagaggaa ccagctacct actcagctct tcagcgtgc gtatgacatc tctgaaaagc aatgctaaga acatggtgac caattctgtt ttactaaatg ggcacagcat gaagcaggaa atggcaatgt gattttggcc attcaactca ctacctggag agaacttagt aa MPSKSLSNLS VTTGANESGS VPEGERDFL PASDGTTEL VIRCVIPSLY LLIITVGLLG P NIMLVKIFIT NSAMRSVPNI FISNLAAGDL LLLITCVFVD ASRYFFDEWM FGKVGCKLIP VIQLTSVGS VFTLTALSAD RYRAIVNPMQ MOTSGALLRT CVKAMGIWV SVLLAVPEAV FSEVARISL DNSSFTACIP YPQDELHPK IHSVLIPLVY FLIPLAISI YYYHIAKTLI KSAHNLPGY NEHTKKQMET RKRLAKIVLV FVGFIFCWF PNHILMYRS FNYNEIDPSL GHMIVTLVAR VLSFGNSCVN PFALYLLSES FRHFNSQLC CGRKSQERG TSYLLSSAV RMTSLKSNK NMVTNSVLLN GHSMKQEMAM	Homo sapiens
199	3380	Neuromedin B Receptor	NP_002502.1		Homo sapiens

200	3404	Neuropeptide Y Receptor Type 2	A	Homo sapiens
			<p> tatactatcc ctatccctagc tttaaacctg agccagagct cactacacag gtctctggct atcgagtctg aatctgcaact actcaactta taaactgtct gcagacacact gttagggaaa ttgtgatca tggcgccgag gatctgaact cgtttacct tcttgtttgg agcacaggga ccgccagct agaggagcac cagcgcaactg cgtccacgct ctggcgagg gtgcggaggga tttgttctcg gtgcaatcct gctggcgctt ttccggggtt ctgcgcgat ccagctcccc atctctgctc ctacacacac aaaaagaaac aactctcgat tggaaagtgt ggaattttct cagccccac gagcgcgagg gattctccag ccccgccct cctcccgcca gctgaggtc tctttgctc gctgctctg ctagggaaccg cagtcctca gccgcagctg ggtctgtccg ccccgcttt gccctgctt ttcccgagg cggatttggg gaagtcggcc tcaagtcacg gaggtctgtc ttcccgagg cagctctgc ggaactggg ggtagagagc aaaggagag atctgtgaa gggaaggag gtagggtgg cgaaacgcc cagagtatca aacttgggg tggcacagta ggtgacagca gcagctgcag gtggtggctg gggacccgag agggggcgcc cctctgggta ggtctggct gagcggtt gcaagcccg gagcggtg agagaccctg gacactgtc ctgctcctc gccacaaa cttctctcc agtccctcc cctgcaggac catcgcccg agcctctga cctgttttct tgtgtttaag ggtggggtt gccccctcc ccacgtccc atctctgac ctcacactt caccgcga ccccgaggt ggtgcggtg ccaggcgcg cttggcctga gaggtcggca gcagaccgg gcgcgggctg tccgtgacc cgcgcagccg ctctgactg tccggctgct cgcgcggcg gcgcgggctg tccgtgacc taggaggga cggaaccga cttgccttg ggcacttcc agggcctct ccaggtcggc tggctaata tcggacagac ggaactgaca catctgtt cgcgtctcc gcaaaacgc gaggtccagg tcagttgtg actctgtgc tgggtgcagg ccaagtggac cgtactgaa aatgggtcca ataggtgcag aggtgatga gaaacagaca gtggaagaaa tgaaggtgga acaatacggg ccacaaaca cctctagagg tgaactggtc cctgaccctg agccagagct tatagatagt accaagctga ttgaggtaca agttgttctc atattggct atctgtccat catctgtctt gggttaattg gcaactcctt ggtgatccat gtggtgatca aattcaagag catgcgaca gtaacaaact ttttcattgc caatctggct gtggcagatc ttttggtaga cactctgtgt ctaccgttca ctcttaccta taccttaattg gggagagtga aatgggtcc tgtcctgtgc cacctggtg cctatgccc gggcctggca gtacaagtat ccacaatcac cttgacagta attgccctgg accggcacag gtgcctgctc taccacctag agagcaagat ctccaagcga atcagcttcc tgattattgg cttggcctgg ggcacatcag cctgtctggc agtccccgtg gccatcttcc gggagtattc gctgattgag atcatcccg actttgagat tgtggcctgt actgaaaagt ggcctggcga ggagaagagc atctatggca ctgtctatag tctttcttcc ttgttgatct tgtatgttt gccctgggc attatatcat tttcctacac tgcattttgg agtaaatga agaaccatgt cagtcctgga gctgcaaatg accactacca tcagcgaagg caaaaaacca ccaaatgct ggtgtgtgtg gtggtgtgt ttgctgtcag ctggctgcct ctccatgct tccagcttgc cgttgacatt gacagccagg tccgtggact gaaggagtac aaactcatct tcacagtgtt ccacatcatc gccatgtgct ccaactttgc caatccccct ctctatggct ggatgaacag caactacaga aaggcttcc tctcggcctt ccgctgtgag cagcggttgg atgcattca ctctgaggtg tccgtgacat tcaaggctaa aaagacctg gaggtcagaa agaacagtgg cccaatgac tcttccacag aggtaccaa tgtctaagga agctgtggtg tgaatatgta tggatgaatt ctgaccagag ctatgaatct ggttgatggc </p>	

Accession	Protein Name	Sequence	Species
NP_000901.1	Neuropeptide Y Receptor Type 2	MGPIGAEEADENQTVEMKVEQYGPQTTPRGELVDPDPEPELIDSTKLIIEVQVVLILAYCSI	P
NP_000901.1	Neuropeptide Y Receptor Type 2	ILLGVIGNSLVIHVVIKFKSMRTVTNFFELANLAVADLLVNTLCLPFTLTYTELMGEWKMG	P
NP_000901.1	Neuropeptide Y Receptor Type 2	VLCILVPIYAQGLAVQVSTITLTVIALDRHRCIVYHLESKISKRISFLIIGLAWGISALLA	P
NP_000901.1	Neuropeptide Y Receptor Type 2	SPLAIFREYSLIEIIPDFEIVACTEKWPGEEKSIYGTVYSLSSLLILYVLPLGIISFSYT	P
NP_000901.1	Neuropeptide Y Receptor Type 2	RIWSKLNHVSPGAANDHYHQRQKTTKMLVCVVVVEAVSWLPLHAFQLAVDIDSQVLDL	P
NP_000901.1	Neuropeptide Y Receptor Type 2	KEYKLIFTVFHITAMCSTFANLLYGMNNSNYRKAFLSAFRCEQRDLDAIHSEVSVTFKAK	P
NP_000901.1	Neuropeptide Y Receptor Type 2	KNLEVRKNNSGPNDSFTEATNV	P

202	3405	Neuropeptide NM_005972 Y Receptor Type 4	atgaacacct ctacacctcct ggcttgctg ctcccaaat ctccacaagg tgaaaaacaga A agcaaacccc tgggcacccc atacaacttc tctgaacatt gccaggattc cgtggacgtg atggtcttca tcgtcacttc ctacagcatt gagactgtcg tgggggtcct gggtaacctc tgctgatgt gtgtgactgt gaggcagaag gagaaagcca acgtgaccaa cctgcttacc gccaacctgg ccttctctga ctctctcatg tgctctctct gccagccgt gccgcccgtc tacaccatca tggactactg gatctttgga gagacctct gcaagatgtc ggccttcac cagtgcattg cggtagcgtt ctccatctc tcgtctgtcc tcgtggccct ggagaggcat cagtcacatca tcaacccaac aggtggaag ccagcatct cacaggccta cctggggatt gtgtcatct gggtcattgc ctgtgtctc tcctgccc tctggccaa cagcactctg gagaatgtct tcacaagaa cactccaag gctctggagt tctggcaga taagtggtc tgtaccgagt cctggccact ggctcaccac cgcacctct acaccactt cctgtctc ttccagtact gcctccact ggccttcac ctggtctgtt atgcacgcat ctaccgggc ctgcagaggc aggggcggt gttcacaag ggcacctaca gcttgcgagc tgggcacatg aagcaggta atgtgtgtct ggtgtgatg gtggtggcct ttgctgtct ctggtgct ctgcatgtgt tcaacagcct ggaagactgg caccatgagg ccatcccat ctgccacggg aacctcatct tcttagtgtg ccactgtct gccatggcct ccactgct caacccatc atctatggct ttctcaacac caactcaag aaggagatca aggcctggt gctgacttgc cagcagagcg cccccctgga ggagtggag catctgccc tgtccacagt acatacggaa gtctccaaag ggtccctgag gctaagtggc aggtccaatc ccatttaa 203	3405	Neuropeptide NP_005963.1 Y Receptor Type 4	MNTSHLLALL LPKSPQGENR SKPLGTPYNF SEHCQSDVDV MPEIVTSYSI ETVGVGLNL P CLMCVTVRQK EKANVTNLLI ANLAESDFLM CLLCQPLTAV YTIMDYWIFG ETLCKMSAFI QCMSVTVSIL SLVLALERH QLIINPTGWK PSISQAYLGI VLIWVIACVL SLPFLANSIL ENVFKNHSK ALEFLADKV CTESWPLAH RTIYTTFLLL FOYCLPLGFI LVCYARIYRR LQRQGRVFKH GTYSLRAGHM KQNVNVLVVM VFAFVWLWP LHVENSLEDW HHEAIPICHG NLIFLVCHLL AMASTCVNPF IYGFINTNFK KEIKALVLTQ QQSAPLEESE HLPLSTVHTE VSKGSIRLSG RSNPI	Homo sapiens
204	3406	Neuropeptide NM_006174 Y Receptor Type 5	gaaaggctat cggtaacaa tgacctgcca caaagttaga agaaaggatt gattcaagaa A agactataat atggatttag agctcgacga gtattataac aagacacttg ccacagagaa taatactgct gccactcgga attctgattt ccagctctgg gatgactata aaagcagtg agatgactta cagtatttct tgattgggct ctatacattt gtaagtcttc ttggctttat ggggaactca cttattttta tggctctcat gaaaaagcgt aatcagaaga ctacgggtaaa cttctcata ggcaatctgg cctttctga tatcttggtt tgctgtttt gctcacctt cacactgacg tctgtcttgc tggatcagtg gatgttggc aaagtcatgt gccatattat gcctttctt caatgtgtgt cagttttggt ttcaacttta attttaatat caattggcat tgtcagggtat catatgataa aacatcccat atctaataat ttaacagcaa accatggcta ctttctgata gctactgtct ggacactagg ttttgccatc tgttctccc ttccagtgtt tcacagtctt gtggaacttc aagaacatt tgggtcagca tctgtgagca gcaggattt atgtgttgag tcatggccat ctgattcata cagaattgcc ttactatct ctttattgct agttcagtat attctgccct tagtttgtct tactgtaagt catacaagtg tctgcagaag tataagctgt ggattgtcca acaagaaaa cagacttgaa gaaatgaga tgatcaact aactctcat ccattcaaaa agagtgggc ctctctggca gccataaatg	Homo sapiens			

205	3406	Neuropeptide Y Receptor Type 5	NP_006165.1	MDLELDEYYN KTLATENNTA ATRNSDFPVW DDYKSSVDDL QYFLIGLYTF VSLLGFMGNL P LILMALMKKR NQKTTWNFLI GNLAFSDIIV VLFCSPTLT SVLLDQWMFG KVMCHIMPFL QCVSVLVSTL ILISIAIVRY HMIKHPISN LNANHYGYFLI ATVNTLGFAL CSPLPVFHSI VELQETFGSA LLSSRYLCVE SWPSDSYRIA FTISLLLVQY ILPLVCLTVS HTSVCRSISC GLSNKENRLE ENEMINLT LH PSKKSQPOVK LSGSHKWSYS FIKKHRRYS KKTACVLPAP ERPSQENHSR ILPENFGSVR SOLSSSSKFI PGVPTCFEIK PEENSVDHEL RVKRSVTRIK KRSRSVFYRL TILILVFAVS WMPLHLFHV TDFNDNLISN RHFKLVYIC HLLGMMSCCL NPILYGFLNN GIKADLVSLI HCLHM	Homo sapiens
206	3408	Neurotensin Receptor Type 1	NM_002531	tcaagctcgc cccgcgcgc cgcagccggg ctggcgctg tctcggggg cctggggaac A cgcgcggttt ggagatcggg ggcacctgga accctggga agcgcgcagc cgggagacag cccgaggaa caccggttct ggagctagga gccggaagct gggagtccgg aggagagcgg agcccgagc cggagcccg gggcggcgcg tctgggtctg gcgttccc actggacggc gcgccgctg gtcttgcca cgcgccctc cctgggctcg cgttcacg tccccgctg agacgcgcc actcctgccc ggacttccag ccccgaggc gccggacaga gccgcggact ccagcgccc ccatgcgct caacagctcc gcgccggaa ccccgggcac gccggccgc gaccccttc agcgggcga gcccgactg gagagggcg tctggggccc ggccttcggc aacgcttcg gcaacgcgc ggagcgcgc ctggcggcac ccagcagcga cctggacgtg aacaccgaca tctactcaa agtgcgtgg accgcgctg accctggcgt cctcgtggtg ggcacggtg gcaacacggt gacggcgtt acgctggcg ggaagaagtc cctgcagagc ctgcagagca cgtgcgatta ccacctggc agcctggcg tctccgacct gctcacctg ctgctggcca tgcgcgtgga gctgtacaac ttcacttggg tgcaccacc ctgggccttc ggcgacgcg gctgcgcgg ctactctc ctgcgcgac cctgcacct cgcacggcc ctcaacgtg ccagcctgag tgtggagcgc tacctggcca tctgccacc ctcaaggcc aagaccctca tgtccggaag ccgcaccaag aagttcatca gcgccatctg gctcgcctg gccctgctga cgtgcctat gctgttcacc atggcgagc agaaccgag gcccgacggc cagcacgcg gcggcgtggt gtgcacccc accatccaca ctgccacct caaggtcgtc atacaggta acaccttcat gtccttcata tccccatgg tggteatctc ggtcctgaac accatcatcg ccaacaagct gaccgtcatg gtacgccagg cggccgagca gggccaagtg tgacaggtcg gggcgagca cagcacattc agcatggcca tcgagcctgg cagggtccag gccctgcggc acggcgtgcg cgtccctacgt gcagtggta tcgccttctg ggtcgtctg ctgccctacc acgtgcggcg cctcatgttc tgcatact cggatgagca gtggactccg ttcctctatg actctacca ctactctac atggtgacca acgactctt ctacgtcagc	Homo sapiens

tccacatca acccatcct gtacaacctc gtctctgcca acttcgcca catctctctg
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gtctctggg cggggtctgt ggtgtgact gaagtgggt tcccggtga tgtcttgatg
ctctatctg tgcattacc gtaggtaggg acagtgtcc atgcaccaca gacacacca

207	3408	Neurotensin Receptor Type 1	NP_002522.1	cgacacctga tctcgtatca ctacgttgcg gccaggtcat gatgtggccc cggaagctgg ccctgcgtgc catgagtgcg tcggtcatgg agtcggagc cctgagccg gccctgggtg acggcacagc cctcacagct caaacgccca ccccaactcc caccatctgc aggtggtgaa acaaaacccc gtgtatctct caataaaggt ggcggaagg cctcatgtg g	Homo sapiens
208	3452	Opiate Receptor-Like 1 (OPRL1)	NM_000913	YSKVLVTAVY LALFVVGTVG NTVTAFTLAR KKSLSQSLST VYHLGSLAL SDLLTLLAM PVELYNFIWV HHPWAFGDAG CRGYFLRDA CTYATALNVA SILSERYLAI CHPFKAKTLM SRSRTKKFIS AIWLASALLT VPMLFTMGEQ NRSADQOHAG GLVCTPTIHT ATVKVVIQVN TFMSFIFPMV VISVLNTIIA NKLTVMVRQA AEQGVQVTVG GEHSTFSMAI EPRVQALRH GVRVLRRAVVI AFVVCWLPYH VRRMLFCYIS DEQWTFELYD FHYFYMTVN ALFYVSSSTIN PLYNLVSVAN FRHIFLATIA CLCPWRRRRR KRPAFSRKAD SVSSNHTLSS NATRETTY	Homo sapiens
				cctgctctgc acctgtcgtc gactgccagc cggctgaggc cgggggtctc caggtggtc A ccagctccca aggaggttgc agaagtaccg tacagagtgg atttgacagg cagtggtcatg gagccccctc tccccgcgcc gtctctggag gtatatctac gcagccacct tcagggcaac ctgtccctcc tgagccccc aa cacagtctg ctgccccgc atctgtgct caatgccagc cacggcgctc tctgccccct cgggctcaag gtcaccatcg tggggtctca cctggcctg tgtgtcggag ggctcctggg gaactgcctt gtcattgacg tcatcctcag gcacaccaaa atgaagacag ccaccaatat ttacatcttt aacctggccc tggccgacac tctgtgtcctg ctgacgtgc ccttcaggg caggacatc ctctgggctc ttggccgtt tgggaatgcg ctgtgcaaga cagtcattgc cattgactac tacaacatgt tcaccagcac ctacacccta actgccatga gtgtggatcg ctatgtagcc atctgccacc ccatcctgac cctcgacgtc cgcacgtcca gcaagccca ggctgtcaat gtggccatct gggccctggc ctctgtgtgc ggtgttccc ttgccatcat gggctcggca caggtcagag atgaagagat cgagtgcctg gtggagatcc ctacccctca ggattactgg ggcccggtgt ttgccatctg catcttccctc ttctccttca tctgtccctg gctcgtcatc tctgtctgct acagcctcat gatccggcgg ctccgtggag tccgcctgct ctggggctcc cgagagaagg accggaacct gcggcgcatc actcggctgg tctgtgtggt agtggctgtg ttcgtgggct gctggacgcc tgtccaggtc ttcgtgtcgg cccaagggt cgggggttcag ccgagcagcg agactgcccgt ggccattctg cgtctctgca cggccctggg ctacgtcaac agctgcctca acccactcct ctacgccttc ctggatgaga acttcaaggc ctgcttccgc agtttctgct gtcatctgac cctgcccggg gacgtgcagg tgtctgaccg cgtgcgcagc attgccaaagg acgtggccct ggccctgcaag acctctgaga cgttacccgc gccgcgatga ctaggcgtgg acctgccccat ggtgcctgtc agcccgcaga gcccatctac gcccaacaca gagctcacac aggtcacctgc tctctaggcg gacacacctt gggccctgag catccagagc ctgggatggg cttttccctg tgggccaggg atgtctcgtc ccagagggag acctagtac atcatgggac aggtcaaaagc attagggcca cctccatggc ccagacaga ctaaaagctc cctcctgggt cagggccgag ggacacaaag gacctacctg gaagcagctg acatgctggt ggacggcctg tactggagcc cgtgccccctc cctccccgtg cttcatgtga ctcttgccct ctctgctgct gcgttggcag aacctgggtt gggcaggcac ccggaggagg agcagcagct gtgtcatcct gtgccccca tgtgtgtgt gctgtttgca tggcagggtt ccagctgctt tcagccctgt gacttctcct cagggcagct ggacaggctt ggcacggccc gggaagtga gcaggcagct tttcttggg gtgggacttg	

Accession	Gene	Protein	Species	Sequence
209	Opiate Receptor-Like 1 (OPRL1)	3452	Homo sapiens	<p>MEPLFPAPFW EVIYGSHLQG NLSLLSPNHS LLPPHLLLLNA SHGAFLLPLGL KVTIVGLYLA P</p> <p>VCVGGLLGNC LVMYVILRHT KMKATNIYI FNIALADTLV LLTLPFQGTDL ILLGFWPFQGN</p> <p>ALCKTVIAID YYNMFSTFT LTAMSDVDRY AICHPIRALD VRTSSKAQAV NVAIWALASV</p> <p>VGVPVAIMGS AQVEDEEIEC LVEIPTPDY WGPVFAICIF LFSFIVPVLV ISVCYSLMIR</p> <p>RLRGVRLLSG SREKDRNLRR ITRLVLVVVA VFVGCTWTPVQ VFVLAQGLGV QPSSETAVAI</p> <p>LRCTALGYV NSCLNFILYA FLDENFKACF RKFCASALR RDVQVSDRVR SIAKDVALAC</p> <p>KTSETVPRPA</p>
210	Ocular Albinism 1 (Nettleship-Falls) (OAI)	3513	Homo sapiens	<p>atgacccagg caggccggcg gggctctggc acacccgagc cgcgctccgcg aacacagccc A</p> <p>atggcctccc cgcgcctagg gacctctgc tgccccacgc gggacgcagc cagcagctc</p> <p>gtgctgagct tccagccggc ggccttccac gcgctctgcc tgggcagcgg cgggctccgc</p> <p>ttggcgctgg gcctctgca gctgctgcc gccgcggcgc cgcgcgccgc cgggtccccc</p> <p>gcgacgtccc cgcgggcctc ggccgcgctc cgtgcgctg cgcgtgcctg cgacctctc</p> <p>ggctgcctgg gtatgggtgat ccggctccac gtgtggttag gattcccaaa ttttgttgac</p> <p>agcgtctcgg atatgaacca caggaaaatt tggcctgctg cttctgcgt ggggagtgcg</p> <p>atgtggatcc agctgttgta cagtgcctgc ttctgggtgc tgttttgcta tgcagtggat</p> <p>gcttatctgg tgatccggag atcggcagga ctgagcacca tctgctgta tcacatcatg</p> <p>gcgtggggcc tggccacct gctctgtgtg gagggagcgc ccatgctcta ctaccttcc</p> <p>gtgtccaggt gtgagcgggg cctggaccac gccatcccc acctatgtcac catgtacctg</p> <p>ccctgtctgc tggttctcgt ggcaacccc atcctgttcc aaagacagt gactgcagtg</p> <p>gcctctttac ttaagggaag acaaggcatt tacacggaga acgagaggag gatgggagcc</p> <p>gtgatcaaga tccgattttt caaaatcatg ctgggtttta ttatttgttg gttgtcgaat</p> <p>atcatcaatg aaagcctttt attctatctt gagatgcaaa cagatatcaa tggaggttct</p> <p>ttgaacacctg tcagaactgc agccaaagcc acatggttta ttatgggaat cctgaatcca</p> <p>gccagggat ttctctgtc ttggccttc tacggctgga caggatgcag cctgggtttt</p> <p>cagctctccc ggaaggagat ccagtggaa tcactgacca cctcgctgc tgagggggct</p> <p>cacctatccc cactgatgcc ccatgaaaac cctgcttccg ggaaggtgtc tcaagtgggt</p> <p>gggcagactt ctgacgaagc cctgagcatg ctgtctgaag gttctgatgc cagcacaatt</p> <p>gaaattcaca ctgcaagtga atcctgcaac aaaaatgagg gtgacctgc tctccaacc</p>

211	3513	Ocular Albinism 1 (Nettleship- Falls) (OAL)	NP_000264.1	catggagacc tatgaagggg atgtgtctggg ggtccagacc ceattctct cagactcaac aattcttgtt ctttagaact gtgttctcac cttccaaca ctgactgcc gaagtgtagc ggccccaaa ccttgctctc atcaccagct agagcttctt ccgaagggc ctttaggata ggagaaaggg ttcattgcaca cactgtgtgag aatggaagag cccctccag accactctac agctgtctta gcttagttg ccaactaggaa gtttctgag gctggctgta aagtaagtgt aaggtccaca tccctggga agtagttaaa taaaatagtt atgactg MTQAGRRGPG TPEPRRTQP MASPRLGTFC CPTRDAATQL VLSFQPRAFH ALCLSGGGLR P LALGLLQLLP GRRPAGGSP ATSPPASVRI LRAAAACDLL GCLGMVIRST VWLGFNPFVD SVSDMNHTEI WPAACVGS A MWIQLLYSAC FWLFCYAVD AYLVIIRASG LSTILLYHIM AWGLATLLCV EGAAMLYPS VSRCEGLDH AIPHYVTMYL PLLLVIVANP ILFQKTVTAV ASLLKGRQGI YTENERMGA VIKIRFFKIM LVLIICWLSN IINESLLFYL EMQTDINGS LKPVRTAAKT TWFIMGILNP AQGFLLSLAF YGWTGCSLGF QSPRKEIQWE SLTTSAAEGA HPSPLMPHEN PASGKVSQVG GQTSDEALSM LSEGSDASTI EIHTASESCN KNEGDPALPT HGDL	Homo sapiens
212	3544	UDP-glucose Receptor (KIAA0001)	NM_014879	gaacagtgtt acctggagc ctacaatgag aggtatttca aaatgagtga agcatgactc A tcacagatga aggcctagac gcaggatctt taatggaaaa acactgggc cacttcaaga cgacaaacgc tcactgggca aaacacctc ctccagaagt tacaagatga tcaattcaac ctccacacag aaatcttaag aggcctctgc ctccagaagt tacaagatga tcaattcaac ctccacacag ctccagatg aatcctgtct tcagaaacctc ctgatcactc agcagatcat tcctgtgctg tactgtatgg tcttcattgc gggaatccta ctcaatggag tgcaggatg gatattctt tacgtgccc gctctaagag ttctatcatc tatctcaaga acattgttat tgctgacttt gtgatgagcc tgacttttcc ttccaagatc cttgggtgact caggccttgg tccctggcag ctgaacgtgt ttgtgtgcag ggtctctgcc gtgctcttct acgtcaacat gtacgtcagc attgtgttct ttgggctcat cagctttgac aggtattata aaattgtaaa gcctcttttg acttcttcca tccagtcagt gagttacagc aaacttctgt cagtgatagt atggatgctc atgtctctcc ttgctgttcc aaatattatt ctccacaaac agagtgttag ggaggttaca caataaaaat gtatagaact gaaaagtga ggggacgga agtggcacaa agcatcaaac tacatcttcg tggccatctt ctggattgtg ttctctttgt taatcgtttt ctatactgct atcacaaaaga aaatctttaa gtcccacctt aagtcaagtc ggaattccac ttcgggtcaaa aagaaatcta gccgaacat attcagcatc gtgtttgtgt ttttgtctg ttttgtacct taccatattg ccagaatccc ctacacaaag agtcagaccg aagctcatta cagctgccag tcaaaagaaa tcttggcgga tatgaaagaa ttcaacttgc tactatctgc tgcaaatgta tgcttgacc ctattattta ttcttttcta tggcagccgt ttagggaaat cttatgtaa aaattgcaca ttcattaaa agtcagaat gacctagaca ttccagaat caaaagagga aatacaaac ttgaaagcac agatactttg tgagttccta cctcttcca aagaaagacc acgtgtgcat gttgtcatct tcaattacat aacagaaatc aataagatat gtgcctcat cataaatatc atctctagca ctgccatcca attagttca ataaattca aatataagtt tccatgcttt ttgttaacat caaagaaaac ataccatca gtaatttctc taatactgac ctttctattc tctattaata aaaaattaat acatacaatt attcaattct atatatata aataagttaa agttataac cactagtctg gtcagttaat gtagaattt aaatagtaaa taaacacaaa cataatcaaa gaaactcac tcaggcatct tctttctta ataccagaa	Homo sapiens

213	3544	UDP-glucose Receptor (K1AA0001)	NP_055694.1	<p> tctagtatgt aattgttttc aacactgtcc ttaaagacta acttgaaagc aggcacagtt tgatgaagg ctagagagct gtttgcaata aaaagtcagg ttttttccct gatttgaaga agcaggaaaa gctgacaccc agacaatcac ttaagaaacc ccttattgat gtatttcattg gcactgcaaa ggaagaggaa tattaattgt atacttagca agaaaatttt ttttttctga tagcactttg aggatattag atacatgcta aatatgtttt ctacaaagac ttacgtcatt taatgagcct ggggttctgg tgtagaata tttttaagta ggctttactg agagaaacta aataattggca tacgttatca gcaacttccc ctgttcaata gbatgggaaa aataagatga ctgggaaaaa gacacaccca caccgtagaa catatatata tctactggcg aatgggaaaag gagaccattt tcttagaaa gcaataaact tgattttttt aaatctaaaa ttacatttaa tgagtgcata ataacacata aaatgaaaat tcacacatca ctttttctg gaaaacagac ggattttact tctggagaca tggcatacgg ttactgactt atgagctacc aaaactaaat tctttctctg ctattaactg gctagaagac attcatctat ttttcaaatg ttctttcaaa acatttttat aagtaaatgtt tgtatctatt tcatgcttta ctgtctatat actaataaag aaatgtttta atactg </p>	Homo sapiens
214	3582	Oxytocin Receptor	NM_000916	<p> KNIVIADEFM SLTPPFKILG DSGLGPMQLN VFVCRVSAVL FYVMYVSIV FFGLISFDRY YKIVKPLWTS FLOSVSYSKL LSVIVWMLML LLAVPNILT NQSVREVTQI KCIELKSELG RKMWKASNYI FVAIFWIVFL LLIVFYTAIT KKIFKSHLKS SRNSTSVKKK SSRNIFSIVF VFFVCFVPYH IARIPYTKSQ TEAHYSCQSK EILRYMKEFT LLLSAANVCL DPILYFFLQ PFREILCKKL HPLKAQNDL DISRIKRGNT TLESTDTL </p>	Homo sapiens
				<p> tgtaaaggct ctgggaccaa cgctggcgca accagctccg ctccggagggt gtctgcgcgg A ctggcctcgc ccgcccccta cggaaccctg gcgatatgct agcctcagcc ccaggacacg cgccgcctcc agacgcctc cgcgcgcgca gcctgggagg cgctcctcgc tgcctcctg taccatcca cgacacagcc agctgcggc gaggggattc caaccgaggc tccagtgaaga gacctcagct tagcatcaca ttagtgcag ccggcaggcc atcccaactc gggccggggag cgacgcgtc actggggccc tcaatgcggc tgcaactcc ccggggggag tcaactttag gttcgcctgc ggaactcggg cagtgaagc cgctgaacat ccgagaggac tggcacgctg ggggctctgg gcttgtggcc ggtagaggat tcccgctcat ttgcagtggc tcagaggagg gtggacccag cagatccgtc cgtggagtct ccaggagtgg agccccgggc gccccacac cctccgacac gccggatccg gccacgccg ccaagccgt aaagggctcg aaggccgggg cgacccgctg ccgccagggt catggaggcc gcgctcgag ccaactggag gcgcaggca gccaacgcc ggcgcgcgc ccggggggcc gagggcaacc gcaccgccg acccccgcg cgcaacgagg ccctggcgcg cgtggagggt gcggtgctgt gctcctcct gctcctggcg ctgagcgga acgcgtgtgt gctgctggcg ctgcgacca caccagaa gcaactcgcg ctctcttct tcatgaagca cctaagcatc gccgacctgg tggggcagt gtttcagggtg ctgccgcagt tgctgtggga catcacctc cgcttctacg gggccgacct gctgtgcgc ctggtaagt acttgagggt ggtgggcatg ttcgcctcca cctacctgct gctgctcatg tccctggacc gctgcctggc catctgccag ccgctgcgct cgctgcgcg ccgcacgac cgctggcag tgctgcac gtggctcggc tgctgggtg ccagcgcgcc gcaggtgcac atctctctc tgcgcagggt ggctgaaggc gtcttgact gctgggcgt ctctacacg ccctggggac ccaaggccta catcacatgg atcacgtag ctgtctatat cgtgccggtc </p>	

atcgtgctcg ctacctgcta cggccttata agcttcaaga tctggcagaa cttgcggctc
aagaccgctg cagcggcggc ggccgagggc ccagaggcgc cggcggctgg cgatgggggg
cgcgtggccc tggcgggtgt cagcagcgtc aagctcatct ccaaggccaa gatccgcacg
gtcaagatga ctttcatcat cgtgctggcc ttcatcgtgt gctggacgcc ttcttcttc
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tggggaccag cttgtcagag ggtagcccta agagaagggt attaccttgt aagaccatct
ggcgcagtgg acctattaga acttgggtta aaaatgttta agaagctaatt gttaagaag
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atcaatatac aaaaatgaat tgtatttctt tatactagca acaacaata tgaacacgaa
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gaaagacatc ctgtgttcat ggatcagact tagtatttgt aagatggcaa tactatccta
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taaatataag agctgaaact ataaaactt agaaagaaac ataggcatag atctttgtaa
ccttgaatta ggcagtggtt tcttagatat gataccaag acaaagcaa ccaatgggaa
aatagggtaaa ttggacttaa tcaagatttg aagcttttgt gattgaaaa accctatcaa
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tggctactaa gcacatgaaa aatactcaac attattattc attagggaaa tgcaagtcaa
aatcacaatg agattccagt ttacaatcac taggatggct acaataaaaa gatggacaag

217	3589	Purinerigic Receptor P2Y ₁ , G- protein coupled, 2 (P2RY2)	NP_002555.1	agcagaacac ttacgcctgt gcaggtttat attggaagc tgtagaggac caggacttgt gcagacgcca cagtcctccc agatattggac catcagtgac tcactgtgga tgaccccatg ctccgtcatt tgacaggggc tcaggatatt cactctgtgg tccagagtca actgttccca taacccttag tcactgtttg tgtgtataag ttgggggaat taagtittca gaaaggcaag agctcaaggc caatgacacc cctggcctga ctcccatgca agtagctggc tgtactgcca aggtacctag gttggagtc agcctaataca agtcaaatgg agaacaaggc ccagagagga aggtggctta ccaagatcac ataccagagt ctggagctga gctacctggg gtgggggcca agtcacaggt tggccagaaa accctggtaa gtaatagggg ctgagtttgc acagtggctt ggaatggact gggcgccacg gtggacttag ctctgaggag taccctccag ccaagagatg aacatctggg gactaatatc atagacccat ctggaggctc ccatgggcta ggagcagtgt gaggctgtaa cttatactaa agttgtgtt gcctgctaaa aaaa MAADLGPWND TINGTWGDE LGYRCRFNED FKYVLLPVSY GWCVLGLCL NAVALYIFLC P RLKTNWASTT YMFHLAVSDA LYAASLPLLV YYYARGDHWP FSTVLCKLVR FLFYTNLYCS ILFLTICISVH RCLGVLRPLR SLRWGRARYA RRVAGAVWVL VIACQAPVLY FVTTSGRGR VTCHDTSAPL LFSRFVAYSS VMLGLLFAVP FAVILVCYVL MARRLLKPAY GTSGGLPRAK RKSVRTIAVV LAVFALCFLP FHVTRTLYS FRSLDLSCHT INAINMAYKV TRPLASANSC LDPVLYFLAG QRLVRFARDA KPPTGPSPAT PARRRLGLRR SDRTDMQRIG DVLGSSEDFR RTESTPAGSE NTKDIRL	Homo sapiens
218	3595	Purinerigic Receptor P2Y ₁	NM_002563	ccccctccg cggggatcca gttgcctgc tccctccgc tcgctggctt ttcgatgtct A tgctgcgcc ctggccgccg ctgcctctc gccgcctct accctcggg gccgcgcct aagtcgagga ggagagaatg accgaggtgc tgtggccggc tgtccccaac gggacggacg ctgccttctt ggcgggtccg ggttcgtctt gggggaacag cacggtcgcc tccactgcg ccgtctctc gtcgttcaaa tgcgccttga ccaagacggg ctccagttt tactacctgc cggctgtcta catcttggta ttcactatcg gcttctcggg caacagcgtg gccatctgga tgttcgtctt ccacatgaag cctgggagcg gcactctcgt gtacatgttc aatttggctc tgcccgactt ctgtacgtg ctgactctgc cagccctgat ctctactac tcaataaaaa cagactggat ctccggggat gccatgtgta aactgcagag gttcatcttt catgtgaacc tctatggcag catcttgttt ctgacatgca tcagtgccea ccggtacagc ggttgggtgt accccccaa gtccctgggc cggctcaaaa agaagaatgc gatctgtatc agcgtgctgg tgtggctcat tgtgtgtgtg gcgatctccc ccactctctt ctactcaggt accggggtcc gcaaaaaaaa aaccatcac tgttacgaca ccacctcaga cgagtacctg cgaagtatt tcatctacag catgtgcag accgtggcca tgttctgtgt ccccttgggt ctgattctgg gctgttacgg attaatgtg agagctttga ttacaaaaa tctggacaac tctctctga ggagaaaaac gattacctg gtaactcattg tactgactgt ttttgcgtg tcttacctc ctttccatgt gatgaaaacg atgaacttga gggcccggtt tgattttcag accccagcaa tgtgtgcttt caatgacagg gtttatgcca cgtatcaggt gacaagaggt ctageaagtc tcaacagttg tgtggacccc attctctatt tcttggcggg agatactttc agaaggagac tctcccagc cacaaggaaa gcttctagaa gaagtggagg aaatttgcaa tccaagagt aagacatgac cctcaatatt ttacttgagt tcaagcagaa tggagatata agcctgtgaa ggcacaagaa tctccaaa cctctctgtt gtaatatggt aggatgctta acagaatcaa gtacttttcc cctctttaac tttctagttt agaaaaaaat caaaccaaga aaatagtgag	Homo sapiens

219	3595	Purinergic Receptor P2Y1	NP_002554.1	<p> tataaaaaat aatagaagta gaaatgccca catccacact tagcttgctt gggtttgctt tcacagcttc tcttccttct gactagaagt atgtataata aacaataact acctagttaa acatttactt tctcttttgc ctttaaaatg tgcaggcttt tctgttttaa gtgtgtgtgc acatgagtac tggggctgtt tttgatatta gtaattctc taagaaaact agccccctgc aacttgagtt tgtggtttat cttagcctta ttgtttttt aaaaaccaca gtaggaataa aaaaactata ttctcagaaa tatctagcat ggtatataac aaacacataa actcatcagt tcatccggca tcagatcaat ggtctcttga gcggggtgtt ttttcagtg tcttataagc atagatgata gttgactgag tttcttttagg gcattgaata gacaagtaaa gctaatgaat ttaaaagcct gaaaagtgat tgttttccag ttatttctgg aaaaggtctc attatatatt gggtgctaaa tgtttgatgg ggaagcctg catatatatt cgtactggta aaatgcattc aaaataatta aagtgcattg attttcttgg taaacacct gagctctctt agacatcttg tgataaagag catttacttg cccactgct gtgcaatgcc ttaggacttt gtttgtgttc caggacaagt gttcactcac atctgtaaaa acaattttaa gaattgcaaa taaattacag accaaagatt gactaaagtc aaataactgt tagtaagtgg aagatatatt gcaggagga cagtatttca gaaaaggaga ggttgacagt catccacaag gcatagcctc caagtatact ctcaaatgta tgaagcaact ggggtgggca gaagacattt tagaatgagg gccttagtct taaaattaaag tcatggtgga gaagactctt gcttccacca agtgttttga aacacaaaat acgatataaa aaaaaaaaaa aaaa </p>	Homo sapiens
220	3596	Purinergic Receptor P2Y5	NM_005767	<p> ctgatgaaag tgcttccaaa ctgaaaaattg gacgtgcctt tacgatggta agcgttaaca A gctcccaactg cttctataat gactccttta agtacacttt gtatgggtgc atgttcagca tggtgtttgt gcttggtgta gtatcccaatt gtgttgccat atacattttc atctgcgtcc tcaaaagtccg aatgaaaact acaacttaca tgattaaact ggcaatgtca gacttgcttt ttgtttttac ttacccttc aggatTTTTT acttcacaa acggaattgg ccatttggag atttactttg taagatttct gtgatgctgt tttataccaa catgtacgga agcattctgt tcttaacctg tattagtgtg gatcgatttc tggcaattgt ctaccatttt aagtc aaaga ctctaagaac caaaagaaat gcaagatttg tttgcactgg cgtgtggtta actgtgatcg gaggaagtgc accgcgctt tttgttcagt ctaccactc tcagggtaac aatgcctcag aagcctgctt tgaaaaatttt ccagaagcca catggaaaac atatctctca aggattgtaa ttttcatcga aatagtggga ttttttattc ctctaatttt aaatgtaact tgttctagta tggtgctaaa aactttaacc aaaccagtta cattaagtag aagcaaaaaa acaaaaacta aggtttttaa atgattttt gtacatttga tcatattctg tttctgtttt gtcccttaca atatcaatct tattttatat tctcttgtga gaacacaaac atttgttaat tgctcagtag tggcagcagt aaggacaatg tacccaatca ctctctgtat tgctgttcc aactgtgtt ttgaccttat agtttactac ttacatcgg acacaattca gaattcaata aaaaatgaaaa </p>	Homo sapiens

221	3596	Puriner Receptor P2Y5	NP_005758.1	actggtctgt caggagaagt gacttcagat tctctgaagt tcatggtgca gagaatttta ttcagcataa cctacagacc ttaaaaagta agatatttga caatgaatct gctgcttgaa ataaaacat taggactcac tgggacagaa ctttcaag MSDLLFVFTL YNDSFKYTL GCMFMMFVL GLVSNCAIY IFICVLKVRN ETTTMINLA P PFKSKTLRTK RNAKIVCTGV WLTVIGGSAP AVFVQSTHSQ GNNASEACFE NFPEATWKTY LSRIVIFIEI VGFPIPLIN VTCSSMVLKT LTKPVLRS KINKTKVLKM IFVHLIIFCF CFVPYNINLI LYSILVRTQTF VNCSVVAAR TMYPIITLCIA VSNCCFDPIV YYFTSDTIQN SIKMNWSVR RSDPRFSEVH GAENFIQHNL QTLKSKIFDN ESAA aaggacagag gaggggccc tctgtcagc tggctggag cagaggtggc tttgtctttt A cggaagaact ggttctgtg aatttgctt tatttcccat caagatcaa ggacctgctc tggggctacc tcaggggccc acaggatgag gggctgggtt tcagatgagt tttctgcttg cctgtcatct ggatagtgct taaaaattg caaactgcct tctgtcagt gtcttgctca ttcttcata cactcctgat atgtctctca gtttctcat ctgctgcctc tccagacttc tgccagaaca ttgcacgca cagtttcagg cacagaactg actggcagca gggctgctc cacgagtggt aatttgctc agcacttcac ggactgcaag cgaggcactt gtaactctt ggataacaag acctctgcca gaagaacctat ggctttggaa ggcggaggtc aggtgagga gatgggtggt gtcctcagt agcccctgct tccctgaaca taggaaccc acctgggcag ccatggaatg ggacaatggc acaggccagg ctctgggtt gccacccacc acctgtgtct accgcgagaa cttcaagcaa ctgctgtgct cactctgta ttccggcggtg ctggcggtg gcctgcccgt gaacatctgt gtcattacc agatctgca gtcgcccggt gcctgagcc gcacggccgt gtacacccta aacctgtctc tggctgacct gctatatgcc tgcctccctg ccctgtcat ctacaactat gcccagggtg atcactggcc ctttggcgac ttccctgccc gcctggtccg ctctctcttc tatgccaacc tgcacggcag catctcttc ctacactgca tcagcttcca gcgtacctg ggcactgccc acccgctggc cccctggcac aacgtgggg gccgcccggc tgcctggcta gtgtgttag ccgtgtggt ggcgtgaca acccagtgcc tgccacagc catctctgct gccacaggca tccagcgtaa ccgactgtc tgctatgacc tcagcccgc tgcctggcc accactata tgcctatgg catggctctc actgtcatcg gcttctgct gcccttctg gccctgctgg cctgctactg tctctggcc tgcgcctgt gccgccagga tggcccggca gagcctgtgg cccaggagcg gcgtggcaag gcggcccga tggccgtggt ggtggctgct gcccttgcca tcagcttctt gcctttcac atcaccaaga cagcctacct ggcagtgcgc tcgacgcgg gcgtcccctg cactgtattg gaggccttg cagcggccta caaaggcacg cggccgtttg ccagtgcga cagcgtgctg gacccatcc tcttctactt caccagaag aagttccgct gcgcaccaca tgagctccta cagaaactca cagccaaatg gcagagggcag ggtcgtgtgag tctccaggt cctgggcagc ctcatattt gccatttgtt ccggggccacc aggagcccca ccaaccccaa accatgcgga gaattagat tcagctcagc tgggcatgga gttaaagatc ctcacaggac ccagaagctc accaaaaact atttcttcag ccttctctt ggcccagacc ctgtgggcat ggagatggac agacctgggc ctggctcttg agaggtccca gtcagccatg gagcgtggg gaaaccacat taaggtgctc acaaaaatac agtgtgacgt gtactgtcaa aa	Homo sapiens
222	3597	Puriner Receptor P2Y6	NM_004154	aaggacagag gaggggccc tctgtcagc tggctggag cagaggtggc tttgtctttt A cggaagaact ggttctgtg aatttgctt tatttcccat caagatcaa ggacctgctc tggggctacc tcaggggccc acaggatgag gggctgggtt tcagatgagt tttctgcttg cctgtcatct ggatagtgct taaaaattg caaactgcct tctgtcagt gtcttgctca ttcttcata cactcctgat atgtctctca gtttctcat ctgctgcctc tccagacttc tgccagaaca ttgcacgca cagtttcagg cacagaactg actggcagca gggctgctc cacgagtggt aatttgctc agcacttcac ggactgcaag cgaggcactt gtaactctt ggataacaag acctctgcca gaagaacctat ggctttggaa ggcggaggtc aggtgagga gatgggtggt gtcctcagt agcccctgct tccctgaaca taggaaccc acctgggcag ccatggaatg ggacaatggc acaggccagg ctctgggtt gccacccacc acctgtgtct accgcgagaa cttcaagcaa ctgctgtgct cactctgta ttccggcggtg ctggcggtg gcctgcccgt gaacatctgt gtcattacc agatctgca gtcgcccggt gcctgagcc gcacggccgt gtacacccta aacctgtctc tggctgacct gctatatgcc tgcctccctg ccctgtcat ctacaactat gcccagggtg atcactggcc ctttggcgac ttccctgccc gcctggtccg ctctctcttc tatgccaacc tgcacggcag catctcttc ctacactgca tcagcttcca gcgtacctg ggcactgccc acccgctggc cccctggcac aacgtgggg gccgcccggc tgcctggcta gtgtgttag ccgtgtggt ggcgtgaca acccagtgcc tgccacagc catctctgct gccacaggca tccagcgtaa ccgactgtc tgctatgacc tcagcccgc tgcctggcc accactata tgcctatgg catggctctc actgtcatcg gcttctgct gcccttctg gccctgctgg cctgctactg tctctggcc tgcgcctgt gccgccagga tggcccggca gagcctgtgg cccaggagcg gcgtggcaag gcggcccga tggccgtggt ggtggctgct gcccttgcca tcagcttctt gcctttcac atcaccaaga cagcctacct ggcagtgcgc tcgacgcgg gcgtcccctg cactgtattg gaggccttg cagcggccta caaaggcacg cggccgtttg ccagtgcga cagcgtgctg gacccatcc tcttctactt caccagaag aagttccgct gcgcaccaca tgagctccta cagaaactca cagccaaatg gcagagggcag ggtcgtgtgag tctccaggt cctgggcagc ctcatattt gccatttgtt ccggggccacc aggagcccca ccaaccccaa accatgcgga gaattagat tcagctcagc tgggcatgga gttaaagatc ctcacaggac ccagaagctc accaaaaact atttcttcag ccttctctt ggcccagacc ctgtgggcat ggagatggac agacctgggc ctggctcttg agaggtccca gtcagccatg gagcgtggg gaaaccacat taaggtgctc acaaaaatac agtgtgacgt gtactgtcaa aa	Homo sapiens

223	3597	Purinergic Receptor P2Y6	NP_004145.1	MEWDNGTGQA LGLPPTTCVY RENFKQLLP PVYSAVLAAG LPLNICVITQ ICTSRRALTR P	Homo sapiens
				TAVYTLNLAL ADLLYACSLP LLIYNYAQGD HWPEGDFACR LVRFLEYANL HGSILFELTCI SFQRYLGICH PLAPWHKRG RRAAWLVCVA VWLAVTTQCL PTAIFAATGI QNRNRTVCYDL SPPALATHYM PYGMALTVIG FLFPFAALLA CYCLILACRLC RQDGPAPVPA QERRGKAARM AVVVAFAAI SFLPFHITKT AYLAVRSTPG VPCTVLEAFA AAYKGTTRPFA SANSVLDPIL FYFTQKKRR RPHELLQKLT AKWQRQGR	
224	3599	G Protein- Coupled Receptor 23 (GPR23)	NM_005296	cctaccggtc catagtgtca gagtgggtgaa cccctgcagc cagcaggcct cctgaaaaaa A aagtcacatgg gtgacagaag attcattgac ttcccaattcc aagattcaaa ttcaagcctc agaccacaggt tgggcaatgc tactgccaat aatacttgca ttgttgatga ttccttcaag tataatctca atggtgctgt ctacagtgtt gtattcatct tgggtctgat aaccaacagt gtctctctgt ttgtctctgt ttccgcatg aaaaatgagaa gtgagactgc tatttttacc accaatctag ctgtctctga ttgtcttttt gtctgtacac taccttttaa aatattttac aacttcaacc gccactggcc ttttgggtgac accctctgca agatctctgg aactgcattc cttaccacaa tctatgggag catgctcttt ctacactgta ttagtgtgga tcgtttcctg gccattgtct atccttttctg atctcgtact attaggacta ggaggaaattc tgccattgtg tgtgctgggt tctggatcct agtcctcagt gggggtattt cagcctcttt gttttccacc actaatgtca acaatgcaac caccacctgc ttggaaggct tctccaaacg tgtctggaag acttatttat ccaagatcac aatatttatt gaagtgtgtg ggtttatcat tctcttaata ttgaatgtct ctgtccttctc tgtgtgtgtg agaactcttc gcaagcctgc tactctgtct caaatggga ccaataagaa aaaagtactg aaatgatca cagtacatat ggcagtcttt gtggtatgct ttgtacccta caactctgtc ctctcttgtt atgcctcgtt gcgctcccaa gctattacta attgcttttt gaaaagattt gcaaaagatca tgtaccatc cactttgtgc cttgcaactc tgaactgttg ttttgacctc tcatctattt acttaccct tgaatccttt cagaagtctc tctacatcaa tgcccacatc agaattggagt cctgttttaa gactgaaaca cctttgacca caaagccttc ccttccagct attcaagagg aagtgagtga tcaaacacaa aataatgggt gtgaattaat gctagaatcc acccttttagg tatgagaaat gtgttcaggt ccagatatgg ttctccttat aatttttctt atgctataaa ctaaaagattt gaagctaatg atactgagaa taatgcacca aatccagtc aataatttat ggtcaaatct aattacaaca accaagatgg tttttattgc tgttttcttc agtaattata ggtcaaatct aattacaaca accaagatgg attgccaac tcttctgctt ggttggaaat tcatgtatc gcattatcca ggtggctagt ggcatttgat aatatagaga tgactttgaa actttcaaaa aggtatttct attocaaatga tatttggtaa ttaggttggg cctataaata tagaacaat tcagggaattt ttaaaaaatt gtgttactac tgatatatgc tagttttatt ttattttttt ggactgtcat tgagtttatt ttagcacaag aatatattta gcctaaccatt attataaga aatgtgtcaa atttttaaca ttggtaaaaat atgttatgtg cattttgaa acagaaaaa aatgctgtg gcatgtacgt gggtgggaag aaaaagaaa ttaacaggat ttacacaatt ataatacca gcagtgtgag tttaaaaaac ttctgtgttt ttacaccaa ttaaaatttt catgtcaaac ttcaagcca gaaagctgct aaatacgtgt ctggcaggta aaagctggaa aattacttaa aacaggaaaa tgtcaataaa aaaacttgag caacaccaac atattttttc ttaaaatgtc acgttatctt cattttggga aactaggttc tataaaatat ttatcctccc tgttatactt tggagcacag cacagccaga aaggggttgc atttgtgccc aggtcaggag caaattgaaa aaaaaataa	Homo sapiens

225	3599	G Protein- Coupled Receptor 23 (GPR23)	NP_005287.1	agtaatacta aaaaatcaaa ctataaaccc aaaaacattta ttaaaacctg aattaatcct ttttggaggg aggagtagag atataaacc tgaataact tattctttct tatcgaattt tggagcctaa tatagccagg agctgctgaa tttgtgcccc tggattggaa ccaataaaaa aaaaaaaaa aaaaattcct MGDRRFIDFQ FQDSNSSLRP RLGNATANNT CIVDDSEKYN LINGAVYSVVF ILGLITNSVS P LFVFCFRMKM RSETAIFITN LAVSDLLFVC TLPFKIFYNF NRHPWFGDTL CKISGTAFLT NIYGSMLFLT CISVDRELA VYFPRSTIR TRNSAIVCA GWILVLSGG ISASLESTTN VNNATTTCFE GFSKRWKTY LSKITIFIEV VGFIPIILN VSCSSVWIRT LRKPATLSQI GTNKKKVLKM ITVHMAVFW CFVPYNSVLF LYALVRSQAI TNCFLERFAK IMYPITLCLA TLNCCFDPEI YYFTLESFQK SFYINAHIRM ESFKTETPL TTKPSLPAIQ EEVSDQTNN GGELMLESTF	Homo sapiens
226	3638	Parathyroid Hormone Receptor 2 (PTH2)	NM_005048	ggccgggtggc ccggggccga ccacccagc tgcgctgctg tactggccac aagtttgctc A tgggcccagcc aagttggcaa ctggaagct tctcccgggc tctggaggag ggtccctgct tcttcctaca gccgttcagg gcatggccgg gctggggggc tgcgtccacg tctggggtg gctaagtctc ggcagctgcc tctggccag agccagctg gattctgatg gcaccattac tatagaggag cagattgtcc ttgtgctgaa agcgaaagta caatgtgaac tcaacatcac agctcaactc caggaggagg aaggtaatg ttccctgaa tgggatggac tcatttgtg gcccagagga acagtgggga aaatatcggc tgttccatgc cctcctata tttatgactt caaccataaa ggagtgtctt tccgacactg taaccccaat ggaacatggg attttatgca cagcttaaat aaacatggg ccaattattc agactcctt cgctttctgc agccagatat cagcatagga aagcaagaat tctttgaacg cctctatgta atgtataccg ttggctactc catctctttt ggttccttgg ctgtggctat tctcatcatt ggttacttca gacgattgca ttgcactagg aactatatcc acatgcactt atttggctct tcatgctga gacgtacaag catctttgtc aaagacagag tagtccatgc tcacatagga taaaggagc tggagtccct aataatgcag gatgacccac aaaattccat tgaggcaact tctgtggaca aatcacata tatcgggtgc aagattgctg ttgtgatgtt tatttacttc ctggctacaa attattattg gatactgtg gaaggtctct acctgcataa tctcatcttt tgggctttct tttcggacac caaatacctg tggggcttca tcttgatagg ctgggggttt ccagcagcat ttgttcagc atgggctgtg gcacgagcaa ctctggctga tgcgaggtgc tgggaactta gtgctggaga catcaagtgg atttatcaag caccgatctt agcagctatt gggctgaatt ttattctgtt tctgaatacg gtagagttc tagctaccaa aatctgggag accaatgcag ttgggcatga cacaagggaag caatacagga aactggccaa atcgacactg gtcctggctc tagtctttgg agtgcatctac atcgtgttctg tatgcctgcc tcaactcttc actgggctcg ggtggagat ccgcatgcac tgtgagctct tctcaactc ctttcagggt tcttttgtgt ctatcatcta ctgctactgc aatggagagg ttcaaggaga ggtgaagaag atgtggagtc ggtggaatct ctcctgggac tggaaaagga caccgccatg tggcagcgc agatgcggt cagtgtctac caccgtgacg cacagcaca gcagccagtc acaggtggcg gccagcacac gcattgtgct tatctctggc aaagctgcca agatcgccag cagacagcct gacagccaca tcaacttacc tggctatgtc tggagtaact cagagcagga ctgcctgcca cactcttcc acgagagagc caaggaaagt agtgggaggc agggagatga tattctaag gagaaacctt ccaggcctat ggaatctaac ccagacactg aaggatgcca aggagaaact gaggatgttc tctgaatgga	Homo sapiens

227	3638	Parathyroid Hormone Receptor 2 (PTH2)	NP_005039.1	MAGLGASLHV GNCFPEWDGL NYSDDLRLFLQ MHLFVSEMLR VMFIYFLATN LADARCWELS LAKSTLVLVL QAEVKKMSR IASRQPDSHI GCQGETEDVL	WGWLMLGSL ICWPRGTGK PDISIGKQEF ATSIFVKDRV YYWILVEGLY AGDIKWIYQA VFGVHYIVFV WNLSVDWKRT TLPGYVWSNS	LARAQLDSG ISAVPCPPYI FERLYVMYTV VHAHIGVKEL LHNLIFFAFF PILAAIGLNF CLPHSFTGLG PPCGSRRCGS EQDCLPHSEH	TITIEEQIVL YDFNHKGVAE GYSISFGSLA ESLIMQDDPQ SDTKYLMGFI ILFLNTVRVL WEIRMHCELF VLTIVTHSTS EETKEDSGRQ	VLKAKVQCEL RHCNPNGTWD VAILIIGYFR NSIEATSVDK LIGWGFPAAF GHDTRKQYRK FNSFQGFVVS SQSQVAASTR GDDILMEKPS	NITAQLQEGE P FMHSLNKTWA RLHCTRNYIH SQYIGCKIAV VAWAVARAT GHDTRKQYRK IYCYCNGEV MVLISGKAAK RPMESNPDTE	Homo sapiens
228	3640	Parathyroid Hormone Receptor 1 (PTH1)	NM_000316	cggaggagacg gctcctgctc catgactaaa gctcaaggag tgctgccaca tgaggaggac atgggaccac tccggactac tggcagctgg caatttctc caccgtgggc ctttaggcgg gctgcgcgcc tgaggctgag tgccaccgcc cctggccacc	cggcctagg tgctgccccg gaggaacaga gtcctgcaga tcagggaagc aaggaggcac atcctgtgct atttatgact gagctggctg accaatgaga tactccgtgt ctgcactgca gtgagcatct cgccacaccg gctgccggct gctgccggct	cgggtggcgat tgctcagctc tcttctgct ggccagccag ccaggaaaga ccactggcag ggccgctggg tcaatcacaa ctgggcacaa ctcgtgaacg ccctggcgct cgcgcaacta tcgtcaagga agcctcaccg acgcgcggct cgcgcggctg	ggggaccgcc cgcgtacgcg gcaccgtgct cataatggaa taaggcatct caggtagccg ggcaccaggt aggccatgcc caggacgtgg ggaggtggtt cctcaccgta catccacatg cgctgtgctc gctgtgagct gtgaccttct	cggatcgcac ctggtggatg cagatgacgt gcgaaaaacg tcagacaagg gggaagctct ggcgccccct gaggtggctg taccgacgct gccaactaca gagagtggtg gacgcctgg gctgtgctca tctcttccat tactctggcg gcccaggcgc gtgaccttct ggaggggctg	cggcctggc cagatgacgt gcgaaaaacg gatggacatc accctgagtc gtctgcggga ctgtgccccg taccgacgct gccaactaca gagagtggtg gacccgctgg gctgtgctca tgctgttccat tactctggcg gcccaggcgc gtgaccttct ggaggggctg	Homo sapiens

229	3640	Parathyroid Hormone Receptor 1 (PTHr1)	NP_000307.1	<p>catggccttc ttctcagaga agaagtacct gtggggcttc acagtcttcg gctggggtct</p> <p>gcccgtgtc ttctgtgctg tgtgggtcag tgtcagagct accctggcca acaccgggtg</p> <p>ctgggacttg agtcctggga acaaaaagtg gatcatccag gtgcccaccc tggcctccat</p> <p>tgtgtcaac ttcatcctct tcataatat cgtccgggtg ctgcccacca agctgcggga</p> <p>gacaaacgcc ggcgggtgtg acacacggca gcagtaccgg aagctgtctca aatccacgct</p> <p>ggtgtcatg cccctctttg gcgtccacta cattgtcttc atggccacac catacacga</p> <p>ggtctcaggg agctctggc aagtcagat gcactatgag atgctcttca actccttcca</p> <p>gggatttttt gtgcgaatca tatactgtt ctgcaatggc gaggtacaag ctgagatcaa</p> <p>gaaatcttgg agccgtgga cactggcact ggacttcaag cgaaggcac gcagcgggag</p> <p>cagcagctat agctacggcc ccatgtgtc ccacacaagt gtgaccaatg tcggccccc</p> <p>tgtgggactc ggcctgcccc tcagccccc cctactgcc actgccacca ccaacggcca</p> <p>ccctcagctg cctggccatg ccaagccagg gacccagcc ctggagaccc tcgagaccac</p> <p>accacctgcc atggctgtc ccaaggacga tgggttctc aacggctcct gctcaggcct</p> <p>ggacgaggag gcctctggc ctgagcggc accctgccctg ctacaggaag agtgggagac</p> <p>agtcattgta ccaggcgtg ggggctggc ctgctgacat agtgatgga cagatggacc</p> <p>aaaagatggg tgggtgaatg attcccact cagggcctgg ggccaagagg aaaaacaggg</p> <p>aaaaaagaa aaaaaaaga aaagga</p>	Homo sapiens
230	3732	PACAP Receptor Type 1	NM_001118	<p>gtpaletlet tppamaapkd dgflngscsg ldeeaagper ppallqeewe tvn</p> <p>agcccagaga cacattggg ctgacctgc gctgctgtca gtggaggcc agtgggtctg A</p> <p>gccaagaagt gtcattggctg gtgctgtgca cgtttccctg gctgtcact gcggggcctg</p> <p>tccgtggggc cggggcagac tccgcaagg acgcgcagcc tgaagtccg cggcccagag</p> <p>acacattggg gctgacctgc cgtgctgtc agtgggaggc cagtgggtgt ggccaagaag</p> <p>tgtcatggct ggtgtgtgc acgtttccct ggctgctc ctctgtctg ctatggcccc</p> <p>tgccatgcat tctgactgca tcttcaagaa ggagcaagcc atgtgctgg agaagatcca</p> <p>gaggggcaat gagctgatg gcttcaatga tctcttcca ggctgtcctg ggatgtggga</p> <p>caacatcacg tgttgaagc ccgcccctgt ggtgtgatg gctctgttca gctgcccctga</p> <p>gctcttccga atcttcaacc cagaccaagt ctgggagacc gaaacattg gagagtctga</p> <p>ttttggtgac agtaactcct tagatctctc agacatgga gtggtgagcc ggaactgcac</p> <p>ggaggatggc tggtcggaac ccttccctca ttactttgat gctgtgggt ttgatgaata</p> <p>tgaatctgag actggggacc aggattatta ctacctgtca gtgaaggccc tctacacggt</p> <p>tggctacagc acatccctcg tcacctcac cactgccatg gtcactcttt gtgccttcg</p> <p>gaagctgcac tgcacacgca acttcatcca catgaacctg tttgtgtcgt tcatgtgag</p>	Homo sapiens

231	3844	PACAP Receptor Type 1	NP_001109.1	<p> gagcatctcc gttctcatca aagactggat tctgtatgag gagcaggaca gcaaccactg cttcattcc actgtggaat gtaaggccgt catggttttc ttccactact gtgtgtgtgc caactacttc tggctgttca tggaggccct gtacctcttc actctgctgg tggagacctt cttccctgaa agagataact tctactggtg caccatcatt ggctggggga ccccaactgt gtgtgtgaca gtgtgggcta cgtgagact ctactttgat gacacaggct gctgggatat gaatgacagc acagctctgt ggtgggtgat caaaggccct gtggttggtt ctatcatggt taactttgtg ctttttattg gcattatcgt catccttctg cagaaacttc agtctccaga catgggaggg aatgagtcca gcatctactt gcgactggcc cggctccacc tctgtctcat cccactattc ggaatccact acacagtatt tgccttctcc ccagagaaatg tcagcaaaaag ggaagagact gtgtttgagc tggggctggg ctctctccag ggctttgtgg tggctgttct ctactgtttt ctgaatggtg aggtacaagc ggagatcaag cgaaaatggc gaagctggaa ggtgaaccgt tacttcgctg tggacttcaa gcaccgacac cgtctctggt ccagcagtgg ggtgaatggg ggcacccagc tctccatcct gagcaagagc agtcccaaa tccgcatgtc tggcctccct gctgacaatc tggccacctg agccatgctc ccct </p>	Homo sapiens
232	3844	Apelin Receptor	NM_005161	<p> VHVSLAALL LLPMAPMHS DCIFKKEQAM CLEKIQRANE LMGFNDSSPG CPGMWDNITC WKPAHVGMV LVSCPELFRI FNPQWETE TIGESDFGDS NSLDLSDMGV VSRNCTEDGW SEPFPHYFDA CGFDEYESET GDQYYILSV KALYTVGYST SLVTLTTAMV ILCRFRKLHC TRNFIHMLNF VSFMLRAISV FIKDWILYAE QDSNHCFIST VECKAMVFF HYCVVSNYFW LFIEGLYLFT LLVETFFPER RYFYWYTIIG WGTPTVCVTV WATRLYLRLAR STLLPLPLFG ALWVVIKGPV VGSIMNFEVL FIGIIVILVQ KLQSPDMGNG ESSIYLRRLAR STLLPLPLFG IHYTVFAFSP ENVSKRERLV FELGLSFQG FVAVLYCFL NGEVQAEIKR KWRSWKVNRV FAVDFKRRHP SLASSGVNGG TQLSILSKSS SQIRMSGDPA DNLAT </p>	Homo sapiens
233	3844	Apelin Receptor	NM_005161	<p> atggaggaag gtggtgattt tgacaactac tatggggcag acaaccagtc tgagtgtgag A tacacagact ggaatctctc gggggccctc atccctgcca tctacatgtt ggtcttctc ctgggcacca cgggaaacgg tctggtgctc tggaccgtgt ttcggagcag ccggagagaag aggcgtctcag ctgatatctt cattgctagc ctggcgtggt actgacctgac ctctgtggtg acgtgcccc tgtgggctac ctacacgtac cgggactatg actggccctt tgggaccttc ttctgcaagc tcagcagcta cctcatcttc gtcaacatgt acgccagcgt ctctgacctc accggcctca gcttcgaccg ctacctggcc atcgtgagcc cagtggccaa tgcctggctg aggctgctgg tcagcggggc cgtggccacg gcagttcttt ggggtctggc cgcctcctg gccatgacctg tcatggtgtt acgcaccacc ggggacttgg agaaccacac taagtgcag tgctacatgg actactccat ggtggccact gtgagctcag agtgggctg ggaagtgggc cttgggggtct cgtccaccac cgtgggcttt gtggtgacct tcaccatcat gctgacctgt tacttcttca tcgccccaac catcgctggc cacttcgcca aggaacgcat cgagggctg cggaagcggc gccggctgct cagcatcatc gtggtgctgg tggtagacct tgcctgtgctg tggatgacct accacctggt gaagacgtg tacatgctgg gcagctgct gactggcccc tgtgactttg acctcttct catgaacatc ttccctact gcacctgcat cagctacgtc aacagctgccc tcaacccctt cctctatgcc tttttcgacc cccgcttccg ccaggcctgc acctccatgc tctgctgtgg ccagagcagg tgcgcaggca cctccacag cagcagtggg gagaagtcaag ccagctactc ttcggggcac agccaggggc ccggcccaaa catgggcaag </p>	Homo sapiens

233	3844	Apelin Receptor	NP_005152.1	ggtggagaac agatgcacga gaaatccatc ccctacagcc aggagaccct tgtggttgac tag MEEGGDFDNY YGADNQSECE YTDWKSSGAL IPAIYMLVFL LGTTGNGLVL WTVFRSSREK P RRSADIFIAS LAVADLTFV TLPLWATYTY RDYDWPFGTF FCKLSSYLIF VNMVASVFCL TGLSFDRYLA IVRPVANARL RLRVSGAVAT AVLWVLAALL ANPVMVLRIT GDLENTTKVQ CYNDYSMVAT VSSEWAVEVG LGVSSITVGF VVFTIMLTC YFFIAQTIAG HFRKERIEGL RKRRRLSII VVLVVTFALC WMPYHLVKTL YMLGSLHWP CDFDLFLMNI FPYCTCISYV NSCLNPFLYA FFDPRFRQAC TSMLCCGQSR CAGTSHSSSG EKSASYSSGH SQGPGPNMGK GGEQMHEKSI PYSQETLVD	Homo sapiens
234	3845	Chemokine- Like Receptor 1 (CMKLR1)	NM_004072	gaattcggca cgagtcaggg aagcagcccc ggcggccagc agggagctca ggacagagca A ggctccctgg gaagcctccg ggtgataggg gtgttccagc tgcggcgctc tgggggttca gagggggatc ttgaatgaac aatgaatga actgctttct gggcaaacag ccacagccag aggagcctgt gattggcaga aagaagccag ggtgtgcaag tctcccaac agcctcgagt ggcctgcagt cacagggaac cctcaggaag acctccggg cagagaccag agggaaagccc atctctccag cagaactgct tggattttc taccaggagg ctccaggctc tgcaacaatg atagcagaag ctgatggcat ctagagatct aggtgggac tagcacagca tcaactctac cactttctgt tggtcacagc aactcaccat gccagtgagc attcaagggg aggagaaata gagtcacatt cttgatggga ggcgtgacat agaatggagg atgaagatta caacacttcc atcagttacg gtgatgaata cctgattat ttagactcca ttgtggtttt ggaggactta tccccctgg aagccagggt gaccaggatc ttctgtgtg tggctacag catcgtctgc ttcctcgga ttctgggcaa tggctgggtg atcatcattg ccacttcaa gatgaagaag acagtgaaca tggctgtggtt cctcaacctg gcagtgaggc atttctgtt caacgtcttc ctcccaatcc atataccta tgcgacctg gactaccat gggttttcgg gacagccatg tgcaagatca gcaacttctt tctcatccac aacatgttca ccagctctt cctgctgacc atcatcagct ctgaccgctg catctctgtg ctctccctg tctggtccca gaaccaccg agcgttcgcc tggcttacat ggcctgcatg gtcactgtgg tctgtgcttt ctcttgagt tccccatctc tctcttccg ggacacagcc aacctgcagt ggaataatc ctgcttcaac aacttcagcc tgtccacacc tgggtcttcc tctgtgcccc ctcaactcca aatggacct gtgggggtata gccggcacat ggtgtgtgact gtcacccgt tctctgtgg ctctcctggtc ccagtcctca tcatcacagc ttgtacctc accatcgtgt gcaaaactgca gcgcaaccg ctggccaaga ccaagaagcc ctccaagatt attgtgacca tcatcattac ctcttcttc tgctggtgcc cctaccacac actcaacctc ctagagctcc accacactgc catgctggc tctgtcttca gcctgggttt gccctggcc actgcccctg ccattgcca cagctgcatg aaccccatc tgtatgttt catgggtcag gacttcaaga agttcaaggt ggccctcttc tctgcctgg tcaatgctct aagtgaagat acaggccact ctctctacc cagccataga agctttacca agatgtcatc aatgaatgag aggaacttca tgaatgagag ggagaccggc atgctttgat cctcactgtg gaaccttca atggactctc tcaaccagg gacaccaag gatagtctt ctgaagatca aggaagaac ctctttagca tccaccaatt ttaactgcat tttgcatggg atgaacagtg ttttatgtg ggaatctagg gcttgaacc ctttcttct agtggacaga acatgctgtg ttccatacag ccttggacta gcaatttatg ctcttggga ggccagcctt gactgactca aagcaaaaaa ggaagaattc	Homo sapiens

237	3846	Sphingolipid NP_001391.2 Receptor Edg1	catgtaagcg ggatccggttt ttggaattt ggtgaagtc acttgattt ctttaaaaa catcttttca atgaaatgtg ttaccatttc atatccattg aagccgaaat ctgcataagg aagccactt tatctaaatg atattagcca ggtcccttgg tgcctagga gaaacagaca agcaaaacaa agtgaaaacc gaatgatta acttttgcaa accaaggag attcttagc aaatgagtct acaaaatag acatcgtct tcccacttt tttgatgtt tattcagaa tcttggtga ttcatttcaa gcaaacat gttgtattt gttgtgttaa agtactttt cttgattttt gaatgtattt gttcaggaa gaagtattt tatggattt tctaaccgt gttaactttt ctagaatcca cctcttctg cccttaagca ttactttaac tggtaggaa cgccagaact tttaagtcca gctattcatt agatagtaat tgaagatatg tataatatt acaaagaata aaaatatatt actgtctctt tagtatgtt ttcagtgtcaa ttaaacgag agatgtcttg tttttttaa aagaatagta ttaaataggt tctgacttt tgtggatcat ttgcacata gctttatcaa cttttaaca ttaataaact gatttttta aag 3846	3847	Sphingolipid NP_005226 Receptor Edg3	catgtaagcg ggatccggttt ttggaattt ggtgaagtc acttgattt ctttaaaaa catcttttca atgaaatgtg ttaccatttc atatccattg aagccgaaat ctgcataagg aagccactt tatctaaatg atattagcca ggtcccttgg tgcctagga gaaacagaca agcaaaacaa agtgaaaacc gaatgatta acttttgcaa accaaggag attcttagc aaatgagtct acaaaatag acatcgtct tcccacttt tttgatgtt tattcagaa tcttggtga ttcatttcaa gcaaacat gttgtattt gttgtgttaa agtactttt cttgattttt gaatgtattt gttcaggaa gaagtattt tatggattt tctaaccgt gttaactttt ctagaatcca cctcttctg cccttaagca ttactttaac tggtaggaa cgccagaact tttaagtcca gctattcatt agatagtaat tgaagatatg tataatatt acaaagaata aaaatatatt actgtctctt tagtatgtt ttcagtgtcaa ttaaacgag agatgtcttg tttttttaa aagaatagta ttaaataggt tctgacttt tgtggatcat ttgcacata gctttatcaa cttttaaca ttaataaact gatttttta aag 3847	238	3847	Sphingolipid NM_005226 Receptor Edg3	catgtaagcg ggatccggttt ttggaattt ggtgaagtc acttgattt ctttaaaaa catcttttca atgaaatgtg ttaccatttc atatccattg aagccgaaat ctgcataagg aagccactt tatctaaatg atattagcca ggtcccttgg tgcctagga gaaacagaca agcaaaacaa agtgaaaacc gaatgatta acttttgcaa accaaggag attcttagc aaatgagtct acaaaatag acatcgtct tcccacttt tttgatgtt tattcagaa tcttggtga ttcatttcaa gcaaacat gttgtattt gttgtgttaa agtactttt cttgattttt gaatgtattt gttcaggaa gaagtattt tatggattt tctaaccgt gttaactttt ctagaatcca cctcttctg cccttaagca ttactttaac tggtaggaa cgccagaact tttaagtcca gctattcatt agatagtaat tgaagatatg tataatatt acaaagaata aaaatatatt actgtctctt tagtatgtt ttcagtgtcaa ttaaacgag agatgtcttg tttttttaa aagaatagta ttaaataggt tctgacttt tgtggatcat ttgcacata gctttatcaa cttttaaca ttaataaact gatttttta aag 3847	239	3847	Sphingolipid NP_005217.1 Receptor Edg3	catgtaagcg ggatccggttt ttggaattt ggtgaagtc acttgattt ctttaaaaa catcttttca atgaaatgtg ttaccatttc atatccattg aagccgaaat ctgcataagg aagccactt tatctaaatg atattagcca ggtcccttgg tgcctagga gaaacagaca agcaaaacaa agtgaaaacc gaatgatta acttttgcaa accaaggag attcttagc aaatgagtct acaaaatag acatcgtct tcccacttt tttgatgtt tattcagaa tcttggtga ttcatttcaa gcaaacat gttgtattt gttgtgttaa agtactttt cttgattttt gaatgtattt gttcaggaa gaagtattt tatggattt tctaaccgt gttaactttt ctagaatcca cctcttctg cccttaagca ttactttaac tggtaggaa cgccagaact tttaagtcca gctattcatt agatagtaat tgaagatatg tataatatt acaaagaata aaaatatatt actgtctctt tagtatgtt ttcagtgtcaa ttaaacgag agatgtcttg tttttttaa aagaatagta ttaaataggt tctgacttt tgtggatcat ttgcacata gctttatcaa cttttaaca ttaataaact gatttttta aag 3847
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Homo
sapiensHomo
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240	3848	C-C Chemokine Receptor 9	NM_006641	SSCINDKNAA LQNGIFCN	ASKEMRRAFF RLVCNCLVRG RGARASPIQP ALDPSRSKSS SSNNSSHSPK VKEDLPHTDP	LLRTVVIVVS VFIACWSPLF ILFLIDVACR VQACPILFKA QWFIVLAVLN SAMNPVIYTL	NLPDCSTILP LYSKKYIAFC ISIFTAILVT IVILYARIYF LVKSSSRKVA NHNNSERSMA	Homo sapiens
				gcccctcatc ccaggcagag agcaaccacag ctctttcccc agacactgag agctggtggt A	gcccctcatc ccaggcagag agcaaccacag ctctttcccc agacactgag agctggtggt A	gcccctcatc ccaggcagag agcaaccacag ctctttcccc agacactgag agctggtggt A		
				gacctgctgc ccaggcagag ttgcacgccc ctccacaagc cctattccca acatggctga	gacctgctgc ccaggcagag ttgcacgccc ctccacaagc cctattccca acatggctga	gacctgctgc ccaggcagag ttgcacgccc ctccacaagc cctattccca acatggctga		
				tgactatggc tctgaatcca catcttccat ggaagactac gttaaactca acttcaactga	tgactatggc tctgaatcca catcttccat ggaagactac gttaaactca acttcaactga	tgactatggc tctgaatcca catcttccat ggaagactac gttaaactca acttcaactga		
				cttctactgt gagaaaaaca atgtcaggca gtttgcgagc catttccctcc cacccttcta	cttctactgt gagaaaaaca atgtcaggca gtttgcgagc catttccctcc cacccttcta	cttctactgt gagaaaaaca atgtcaggca gtttgcgagc catttccctcc cacccttcta		
				ctgggctcgtg ttcatcgtgg gtgccttggg caacagtcctt gttatcccttg tctactggta	ctgggctcgtg ttcatcgtgg gtgccttggg caacagtcctt gttatcccttg tctactggta	ctgggctcgtg ttcatcgtgg gtgccttggg caacagtcctt gttatcccttg tctactggta		
				ctgcacaaga gtgaagacca tgaccgacat gttccttttg aatttgcaa ttgctgacct	ctgcacaaga gtgaagacca tgaccgacat gttccttttg aatttgcaa ttgctgacct	ctgcacaaga gtgaagacca tgaccgacat gttccttttg aatttgcaa ttgctgacct		
				cctctttctt gtcactcttc ccttctggc cattgctgct gctgaccagt ggaagtcca	cctctttctt gtcactcttc ccttctggc cattgctgct gctgaccagt ggaagtcca	cctctttctt gtcactcttc ccttctggc cattgctgct gctgaccagt ggaagtcca		
				gaccttcagt tgcaagggtg tcaacagcat gtacaagatg aacttctaca gctgtgtgtt	gaccttcagt tgcaagggtg tcaacagcat gtacaagatg aacttctaca gctgtgtgtt	gaccttcagt tgcaagggtg tcaacagcat gtacaagatg aacttctaca gctgtgtgtt		
				gctgatcatg tgcacagcg tggacaggta cattgccatt gcccaggcca tgagagcaca	gctgatcatg tgcacagcg tggacaggta cattgccatt gcccaggcca tgagagcaca	gctgatcatg tgcacagcg tggacaggta cattgccatt gcccaggcca tgagagcaca		
				tacttggagg gagaaaaggc ttttgtacag caaaatgggt tgctttacca tctgggtatt	tacttggagg gagaaaaggc ttttgtacag caaaatgggt tgctttacca tctgggtatt	tacttggagg gagaaaaggc ttttgtacag caaaatgggt tgctttacca tctgggtatt		
				ggcagctgct cctgcacatc cagaaaatctt atacagccaa atcaaggagg aatccggcat	ggcagctgct cctgcacatc cagaaaatctt atacagccaa atcaaggagg aatccggcat	ggcagctgct cctgcacatc cagaaaatctt atacagccaa atcaaggagg aatccggcat		
				tgctatctgc accatggtt accctagcga tgagagcacc aaactgaagt cagctgtctt	tgctatctgc accatggtt accctagcga tgagagcacc aaactgaagt cagctgtctt	tgctatctgc accatggtt accctagcga tgagagcacc aaactgaagt cagctgtctt		
				gacctgaag gtcattctgg ggttcttctt tcccttcgtg gtcattgctt gctgtctatac	gacctgaag gtcattctgg ggttcttctt tcccttcgtg gtcattgctt gctgtctatac	gacctgaag gtcattctgg ggttcttctt tcccttcgtg gtcattgctt gctgtctatac		
				catcatcatt cacacctga tacaagccaa gaagtcttcc aagcacaaag ccctaaaagt	catcatcatt cacacctga tacaagccaa gaagtcttcc aagcacaaag ccctaaaagt	catcatcatt cacacctga tacaagccaa gaagtcttcc aagcacaaag ccctaaaagt		
				gacctcact gtcctgacct tctttgtctt gctcagttt cctacaact gcattttgtt	gacctcact gtcctgacct tctttgtctt gctcagttt cctacaact gcattttgtt	gacctcact gtcctgacct tctttgtctt gctcagttt cctacaact gcattttgtt		
				ggtgcagacc attgacgctt atgccatgtt catctccaac tgtgccgttt ccaccaacat	ggtgcagacc attgacgctt atgccatgtt catctccaac tgtgccgttt ccaccaacat	ggtgcagacc attgacgctt atgccatgtt catctccaac tgtgccgttt ccaccaacat		
				tgacatctgc ttccaggctca ccagacctat cgccttcttc cacagttgct tgaacctgt	tgacatctgc ttccaggctca ccagacctat cgccttcttc cacagttgct tgaacctgt	tgacatctgc ttccaggctca ccagacctat cgccttcttc cacagttgct tgaacctgt		
				tctctatgtt tttgtgggtg agagattccg ccgggatctc gtgaaaaacc tgaagaactt	tctctatgtt tttgtgggtg agagattccg ccgggatctc gtgaaaaacc tgaagaactt	tctctatgtt tttgtgggtg agagattccg ccgggatctc gtgaaaaacc tgaagaactt		
				gggttgcac agccaggccc agtgggtttc atttacaagg agagaggaa gcttgaagct	gggttgcac agccaggccc agtgggtttc atttacaagg agagaggaa gcttgaagct	gggttgcac agccaggccc agtgggtttc atttacaagg agagaggaa gcttgaagct		
				gtcgtctatg ttgctggaga caacctcagg agcactctcc cctgaggggg tcttctctga	gtcgtctatg ttgctggaga caacctcagg agcactctcc cctgaggggg tcttctctga	gtcgtctatg ttgctggaga caacctcagg agcactctcc cctgaggggg tcttctctga		
				ggtgcatggt tcttttggaa gaaatgagaa atacagaaac agtttcccca ctgatgggac	ggtgcatggt tcttttggaa gaaatgagaa atacagaaac agtttcccca ctgatgggac	ggtgcatggt tcttttggaa gaaatgagaa atacagaaac agtttcccca ctgatgggac		
				cagagagagt gaaagagaaa gaaaaactca gaaagggtatg aatctgaact atatgattac	cagagagagt gaaagagaaa gaaaaactca gaaagggtatg aatctgaact atatgattac	cagagagagt gaaagagaaa gaaaaactca gaaagggtatg aatctgaact atatgattac		
				ttgtagtcag aatttgccaa agcaaatatt tcaaaatcaa ctgactagtg caggaggctg	ttgtagtcag aatttgccaa agcaaatatt tcaaaatcaa ctgactagtg caggaggctg	ttgtagtcag aatttgccaa agcaaatatt tcaaaatcaa ctgactagtg caggaggctg		
				ttgattggct ctgactgtg atgcccgcaa ttctcaaaagg aggaactaagg accggcactg	ttgattggct ctgactgtg atgcccgcaa ttctcaaaagg aggaactaagg accggcactg	ttgattggct ctgactgtg atgcccgcaa ttctcaaaagg aggaactaagg accggcactg		
				tgagacccc tggccttggc actgcccga gcatcaatgc cgtgcctctt ggaggagccc	tgagacccc tggccttggc actgcccga gcatcaatgc cgtgcctctt ggaggagccc	tgagacccc tggccttggc actgcccga gcatcaatgc cgtgcctctt ggaggagccc		
				ttggattttc tccatgcact gtgaacttct gtggcttcag ttctcatgct gcctcttcca	ttggattttc tccatgcact gtgaacttct gtggcttcag ttctcatgct gcctcttcca	ttggattttc tccatgcact gtgaacttct gtggcttcag ttctcatgct gcctcttcca		
				aaaggggaca cagaagcact ggctgctgct acagaccgca aaagcagaaa gtttcgtgaa	aaaggggaca cagaagcact ggctgctgct acagaccgca aaagcagaaa gtttcgtgaa	aaaggggaca cagaagcact ggctgctgct acagaccgca aaagcagaaa gtttcgtgaa		
				aatgtccatc tttgggaaat tttctacctt gctcttgagc acctaatttc ctctgttctt	aatgtccatc tttgggaaat tttctacctt gctcttgagc acctaatttc ctctgttctt	aatgtccatc tttgggaaat tttctacctt gctcttgagc acctaatttc ctctgttctt		
				ttatagattc ctgatctaga acctttccag gcaatctcag cctataacct ctctgttctt	ttatagattc ctgatctaga acctttccag gcaatctcag cctataacct ctctgttctt	ttatagattc ctgatctaga acctttccag gcaatctcag cctataacct ctctgttctt		
				ccttgttctg ttcctgggcca gtgaaggctc ttgttctgat tttgaaacga tctgcaggtc	ccttgttctg ttcctgggcca gtgaaggctc ttgttctgat tttgaaacga tctgcaggtc	ccttgttctg ttcctgggcca gtgaaggctc ttgttctgat tttgaaacga tctgcaggtc		
				ttgccagtga accctggac aactgaccac acccaaaag catccaaagt ctgttggctt	ttgccagtga accctggac aactgaccac acccaaaag catccaaagt ctgttggctt	ttgccagtga accctggac aactgaccac acccaaaag catccaaagt ctgttggctt		
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				aggagccagc ctggcccttg ttgtaggctt gttctgttga gtggcacttg ctttgggtcc	aggagccagc ctggcccttg ttgtaggctt gttctgttga gtggcacttg ctttgggtcc	aggagccagc ctggcccttg ttgtaggctt gttctgttga gtggcacttg ctttgggtcc		
				accgtctgtc tgcctccctag aaaatgggct ggttcttttg gcccttcttct tctgaggcc	accgtctgtc tgcctccctag aaaatgggct ggttcttttg gcccttcttct tctgaggcc	accgtctgtc tgcctccctag aaaatgggct ggttcttttg gcccttcttct tctgaggcc		
				cactttattc tgaggaatac agtgagcaga tatgggcagc agccaggtag ggcaaaaggg	cactttattc tgaggaatac agtgagcaga tatgggcagc agccaggtag ggcaaaaggg	cactttattc tgaggaatac agtgagcaga tatgggcagc agccaggtag ggcaaaaggg		
				tgaagcgcag gccttgctgg aaggctattt acttccatgc ttctctttt ctactctat	tgaagcgcag gccttgctgg aaggctattt acttccatgc ttctctttt ctactctat	tgaagcgcag gccttgctgg aaggctattt acttccatgc ttctctttt ctactctat		

Accession	Gene	Protein	Species	Sequence
241	3848	C-C Chemokine Receptor 9	Homo sapiens	<p>agtggaaca ttttaaacg gagattaggc tgaataatgga</p> <p>attcaacctt gcatcttttg tgtctttctt ggaataatg atcaactttg</p> <p>aaaatatttc acatatttga aaagtgtctt ttaattgtga tatgaagcat taattacttg</p> <p>tcaactttctt taccctgtct caatatattta agtgtgtgca attaagatc aaatagatac</p> <p>at</p> <p>NP_006632.2 MADDYGSEST SSMEDYVNFN FTDFYCEKNN VRQFASHFLP PLYWLVFIVG ALGNSLVILV P</p> <p>YWYCTRVKTM TDMFLNLAI ADLLFLVTLF FWAIAADQW KEQTFMCKWV NSMYKMFYS</p> <p>CVLLIMCISV DRYAIAQAM RAHTWREKRL LYSKMCVFTI WVLAAALCIP EILYSQIKEE</p> <p>SGIAICTMAY PSDESTKLKS AVLTCLKVILG FFLPFVVMAC CYTIIHTLI QAKKSSHKHA</p> <p>LKVITITVTV FVLSQFPYNC ILLVQTIDAY AMFISNCAVS TNIDICFQVT QTIAFHSL</p> <p>NPVLYVFVGE RFRDLVKTL KNLGCSISQAQ WVSFTRREGS LKLSSMLLET TSGALS</p>
242	3849	G Protein-Coupled Receptor GPR1	Homo sapiens	<p>atggaagatt tggaggaaac attatttgaa gaatttgaaa actattccta tgacctagac A</p> <p>tattactctc tggagctga tttggaggag aaagtccagc tgggagttgt tcaactgggtc</p> <p>tccctgggtg tatattgttt ggctttttgt ctgggaattc caggaaatgc catcgtcatt</p> <p>tgggtcacgg ggctcaagtg gaagaagaca gtcaccactc tgtggttctt caatctagcc</p> <p>attggcgatt tcaattttct tctctttctg cccctgtaca tctctatgt ggccatgaat</p> <p>tccactggc cctttggcat ctggctgtgc aaagccaatt ccttactgc ccagttggaac</p> <p>atgtttgcc a gtgttttttt cctgacagtg atcagcctgg accactatat ccacttgatc</p> <p>catcctgtct tatctcatcg gcatcgaaac ctcaagaact cctgattgt cattatatc</p> <p>atctggcttt tggcttctct aattggcggg cttgcctctg acttcgggga cactgtggag</p> <p>ttaataaatc atactctttg ctataacaat tttcagaagc atgacactga cctcactttg</p> <p>atcaggcacc atgttctgac ttgggtgaaa tttatcattg gctatctctt ccttttgcta</p> <p>acaatgagta tttgctactt gtgtctcact ttcaaggtga agaagcgaac agtcttgatc</p> <p>tccagtaggc atttctggac aattctggtt gtggtgtggt cctttgtggt ttgctggact</p> <p>ccttatcacc tgtttagcat ttgggagctc accattcacc acaatagcta tccccaccat</p> <p>gtgatgcagg ctggaatccc cctctccact ggtttggcat tctcaatag ttgcttggaac</p> <p>ccatccttt atgtccta at tagtaagaag ttccaagctc gcttcgggtc ctgagttgct</p> <p>gagatactca agtacacact gtgggaagtc agctgttctg gcacagttag tgaacagctc</p> <p>aggaactcag aaaccaagaa tctgtgtctc ctggaacag ctcaataa</p> <p>NP_005270.1 MEDLEETLFE EFENYSYDL D YYSLESDLEE KVQLGVVHWV SLVLYCLAFV LGIPGNAIVI P</p> <p>WFTGLKWKKT VTTLWFLNLA IADFIFLLFL PLYISYVAMN FHWPFGIWLC KANSFTAQLN</p> <p>MFASVFFLTV ISLDHYIHLI HPVLSHRHRT LKNSLIVIF IWLASLIGG PALYFRDTVE</p> <p>FNNHTLCYNN FQKHDPDLTL IRHVLTVWK FIIGYLFPLL TMSICYLCI FKVKRTVLI</p> <p>SSRHEFTILV VVAFVVCWT PYHLSIWEL TIHNSYSYSH VMQAGIPLST GLAFINSCLN</p> <p>PILYVLISK FQARFRSSVA EILKYTLWEV SCSGTVSEQL RNSETKNICL LETAQ</p>
243	3849	G Protein-Coupled Receptor GPR1	Homo sapiens	<p>atggcctcat cgaccactcg ggccccagc gttttctgact tatttcttg gctgcgcgcg A</p> <p>gcggtcaaaa ctcccgcaca ccagagcgca gaggcctcgg cgggcaacgg gtcggtggct</p> <p>ggcgcggacg ctccagccgt cagcccttc cagagcctgc agctggtgca tcagctgaag</p> <p>gggtgatcg tgcgtctcta cagcgtcgtg gtggtcgtgg ggctggtgg caactgcctg</p> <p>ctggtgctgg tgatcgcgcg ggtgcgcgg ctgcacaacg tgacgaactt cctcatcgcc</p> <p>aacctggcct tgcctgacgt gctcatgtgc accgcctcgg tgcggtccac gctggcctat</p>
244	3850	G Protein-Coupled Receptor 10 (GPR10)	Homo sapiens	<p>atggcctcat cgaccactcg ggccccagc gttttctgact tatttcttg gctgcgcgcg A</p> <p>gcggtcaaaa ctcccgcaca ccagagcgca gaggcctcgg cgggcaacgg gtcggtggct</p> <p>ggcgcggacg ctccagccgt cagcccttc cagagcctgc agctggtgca tcagctgaag</p> <p>gggtgatcg tgcgtctcta cagcgtcgtg gtggtcgtgg ggctggtgg caactgcctg</p> <p>ctggtgctgg tgatcgcgcg ggtgcgcgg ctgcacaacg tgacgaactt cctcatcgcc</p> <p>aacctggcct tgcctgacgt gctcatgtgc accgcctcgg tgcggtccac gctggcctat</p>

245	3850	G Protein- Coupled Receptor 10 (GPR10)	NP_004239.1	<p>gccttcgagc cagcgggctg ggtgttcggc ggcgccctgt gccacctggt cttcttctgt cagccggtca ccgtctatgt gtcggtgttc acgctcacca ccatcgagtg gaccgctac gtcgtgctgg tgcacccgct gagcgggcgc atctcgtgc gctcagcgc ctacgctgtg ctggccatct gggcgctgtc cgcggtgctg gcgctgccc cgcgctgca cacctatcac gtggagctca agccgcacga cgtgcgctc tgcgaggagt tctggggctc ccaggagcgc cagcgccagc tctacgcctg gggcgctgctg ctggtcacct acctgctccc tctgctggtc atcctcctgt cttacgtccg ggtgtcagtg aagctccgca accgctggtt gccgggctgc gtgacccaga gccaggccga ctgggacgc gctcgggcgc ggccacctt ctgcttgcctg gtggtggtcg tgggtgtgtt cgcgctctgc tggctgccc tgcagctctt caacctgctg cgggacctcg accccacgc catcgacct tacgcctttg ggtggtgca gctgctctgc cactggctcg ccatgagttc ggctgctac aaccttca tctacgcctg gctgcaagc agcttcgcg aggagctgcg caactgttg gtcgcttggc ccgcaagat agcccccat ggccagaata tgacctcag cgtggtcatc tga</p> <p>GLIVLLYSV VVGLVGNCL LVLVIARVRR LHNVTNFIG NLALSDVLMC TACVPLTLAY AFEPGRGWFG GGLCHLVFFL QPVTIVYSVF TLTIIADVRY VVLVHPLRRR ISRLSAYAV LAIWALSAVL ALPAAVHTYH VELKPHDVRL CEEFWGQSR QQLYAWGLL LVTYLLPLLV ILLSYVRVSV KLRNRVPGC VTQSQADWDR ARRRRTFCLL VVVVVVFAVC WLPLHVFNLL RDLDPHAIDP YAFGLVQLLC HWLAMSSACY NPFIYAWLHD SFREELRKLL VAWPRKIAPH GQNMTVSIVI</p>	Homo sapiens
246	3851	G Protein- Coupled Receptor GPR12	NM_005288	<p>atgaatgaag acctgaaggt caatttaagc gggtgcctc gggattattt agatgcgct A gctgcggaga acatctcggc tgcgtctccc tcccgggttc ctgcgctaga gccagagcct gagctcgtag tcaacccctg ggacattgtc ttgtgtacct cgggaacctt catctcctgt gaaaatgcca ttgtggtcct tatcatcttc cacaacccca gctgcgagc acctatgttc ctgctaatag gcagcctggc tcttcagac ctgctggcgc gcatgggact catcaccaat tttgtttttg cctacctgtt tcagtcagaa gccaccaagc tggtcacgat cggcctcatt gtcgcctctt tctctgcctc tgcctgcagc ttgctggcta tcaactgtga ccgctacctc tcaactgtact acgctctgac gtacctctg gagaggacgg tcaactgttac ctatgtcatg ctcgtcatgc tctgggggac ctccatctgc ctggggctgc tgcagacgc taccagaag caacgcggcc tgccctccgag acgagtcac ctcctctcct ctctatgttt gcgctcatgc tccagctcta catccagatc atcctctcgg tgcctcct tgcagagcgtg gaaaggggtc tccacctgg ctatcactt ggggaacttt tgtaagattg tgatgaggca cgcctcatcag atagccctgc agcaccactt cctgggccacg tcgcactatg tgaccacccg gaaaggggtc tccacctgg ctatcactt ggggaacttt gctgcttgct ggatgccttt caccctctat tcttgatag cggattacac ctaccctcc atctatacct acgccacct cctgcccgc accataaatt ccatcatcaa ccctgtcata tatgctttca gaaaccaaga gatccagaaa gcgctctgtc tcatttgcgt cggctgcatc ccgtccagtc tcgcccagag agcgctcgc cccagtgatg tgtag</p> <p>MNEDLKVNL GLPRDYLDAA AAENISAAVS SRVPAVEPEP ELVNPWDIV LCTSGTLISC P ENAIIVLIIF HNPSLRAPMF LLIGSLALAD LLAGIGLITN FVFAYLLQSE ATKLVITIGLI VASFSASVCS LLAITVDRYL SLYVALTYHS ERTVTFTYVM LVMLWGTSC LGLLPVMGWN CLRDESTCSV VRPLTKNAA ILSVSFLFMF ALMLQLYIQI CKIVMRHAHQ IALQHHFLAT</p>	Homo sapiens
247	3851	G Protein- Coupled Receptor GPR12	NP_005279.1	<p>gccttcgagc cagcgggctg ggtgttcggc ggcgccctgt gccacctggt cttcttctgt cagccggtca ccgtctatgt gtcggtgttc acgctcacca ccatcgagtg gaccgctac gtcgtgctgg tgcacccgct gagcgggcgc atctcgtgc gctcagcgc ctacgctgtg ctggccatct gggcgctgtc cgcggtgctg gcgctgccc cgcgctgca cacctatcac gtggagctca agccgcacga cgtgcgctc tgcgaggagt tctggggctc ccaggagcgc cagcgccagc tctacgcctg gggcgctgctg ctggtcacct acctgctccc tctgctggtc atcctcctgt cttacgtccg ggtgtcagtg aagctccgca accgctggtt gccgggctgc gtgacccaga gccaggccga ctgggacgc gctcgggcgc ggccacctt ctgcttgcctg gtggtggtcg tgggtgtgtt cgcgctctgc tggctgccc tgcagctctt caacctgctg cgggacctcg accccacgc catcgacct tacgcctttg ggtggtgca gctgctctgc cactggctcg ccatgagttc ggctgctac aaccttca tctacgcctg gctgcaagc agcttcgcg aggagctgcg caactgttg gtcgcttggc ccgcaagat agcccccat ggccagaata tgacctcag cgtggtcatc tga</p> <p>GLIVLLYSV VVGLVGNCL LVLVIARVRR LHNVTNFIG NLALSDVLMC TACVPLTLAY AFEPGRGWFG GGLCHLVFFL QPVTIVYSVF TLTIIADVRY VVLVHPLRRR ISRLSAYAV LAIWALSAVL ALPAAVHTYH VELKPHDVRL CEEFWGQSR QQLYAWGLL LVTYLLPLLV ILLSYVRVSV KLRNRVPGC VTQSQADWDR ARRRRTFCLL VVVVVVFAVC WLPLHVFNLL RDLDPHAIDP YAFGLVQLLC HWLAMSSACY NPFIYAWLHD SFREELRKLL VAWPRKIAPH GQNMTVSIVI</p>	Homo sapiens

248	3852	CX3C	Chemokine Fractalkine Receptor 1	NM_001337	SHYVTRKGV STLAIIIGTF AACWMPFTLY SLIADYTPS IYTYATLLPA TYSIINPVI YAFRNQEIQK ALCLICCGCI PSSLAQRARS PSDV ggggcagatc cagattccct ttgcagtcga cgccaggcct tcaccatgga tcagttccct A gaatcagatga cagaaaaactt tgagtacgat gatctggctg aggcctgta tattggggac atcgtggctc ttgggactgt gttcctgtcc atattctact ccgtcatctt tgccattggc ctgggtggaa atttgttgt agtgtttgccc ctccacca cgaagaagcc caagagtgtc accgacattt accctcctgaa cctggccttg tctgatctgc tgtttgtagc cactttgccc ttctggactc actatttgat aaatgaaaag ggctccaca atgccatgtg caaattcact accgccttct tcttcacgtg cttttttgga agcatattct tcataccgt catcagcatt gataggtacc tggccatcgt cctggccgcc aatcccatga acaaccggac cgtgcagcat ggcgtcacca tcagcctagg cgtctgggca gcagccattt tgggtggcagc acccagttc atgttcacaa agcagaaaaga aaatgaatgc ctgtgtgact acccggagt ccttcaggaa atctggcccg tgcctcgcaa tgtgaaaaca aatttcttg gttcctact cccctgtc attatgagtt atgtctactt cagaatcacc cagacgtgtt tttcctgcaa gaaccacaa aaagccaaag ccattaaact gaccctctg cttggtcctg tgttttctt cttctggaca ccctacaacg ttatgatttt cctggagacg cttaaagctt atgacttctt tcccagttgt gacatgagga aggatctgag gctggccctc agtgtgactg agcgggtgc attagccat tgttgccctga atcctctcat ctatgcattt gctggggaga agttcagaag atacctttac cacctgtatg gaaaatgcct ggctgtcctg tgtggggcgt cagtcacgt tgatttctcc tcacttgaat cacaagaagag caggcatgga agtgttctga ccagcaattt tacttaccac acgagtgatg gagatgcatt gctccttctc tgaagggaat cccaaagcct tgtgtctaca gagaacctgg agttcctgaa cctgatgctg actagtggag aagatttttg ttgttatttc ttacaggcac aaatgatgg acccaatgca cacaacaaa ccttagagtg ttgttgagaa ttgtgctcaa aatttgaaga atgaacaaat tgaactctt gaatgacaaa gagtagacat ttctcttact gcaaatgtca tcagaacttt ttggtttgca gatgacaaaa attcaactca gactagtta gtaaatgag ggtggtgaat atgttctata ttgtggcaca agcaaaaagg gtgtctgagc cctcaagtg aggggaacca gggcctgagc caagcta NP_001328.1 MDQFPESVTE NFEYDDLAE CYIGDIVFG TVFLSIFYSV IFAIGLVGNL LVVFALTNSK P KPKSVTDIYL LNLASDLLF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSMMN RTVQHGVITIS LGVMAAAILV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVTNFI GF LLPLLLIMSYC YFRIQTLES CKNHKKAKAI KLILLVIVF FLFWTPYNVM IFLETLLYD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRLYLHLYGK CLAVLCGRSV HVDFSSSEQ RSRHGSVLSS NPTYHTSDGD ALLLL atggaccag aagaaacttc agttatttg gattattact atgctacagag cccaaactct A gacatcaggg agaccactc ccatgttctt tacacctctg tcttcttcc agtcttttac acagctgtgt tctgactgg agtgcctggg aaccttgttc tcattgggagc gttgcatttc aaacccggca gccgaagact gatcgacatc ttatcatca atctggctgc ctctgacttc atthttcttg tcacattgcc tctctgggtg gataaagaag catctctagg actgtggagg acgggctcct tctgtgcaa agggagctcc tacatgatct ccgtcaatat gcactgcagt gtcctcctgc tcacttgcat gagtgtgac cgctacctgg ccattgtgtg gccagtcgta tcaggaaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttatc	Homo sapiens
249	3852	CX3C	Chemokine Fractalkine Receptor 1	NP_001328.1	SHYVTRKGV STLAIIIGTF AACWMPFTLY SLIADYTPS IYTYATLLPA TYSIINPVI YAFRNQEIQK ALCLICCGCI PSSLAQRARS PSDV ggggcagatc cagattccct ttgcagtcga cgccaggcct tcaccatgga tcagttccct A gaatcagatga cagaaaaactt tgagtacgat gatctggctg aggcctgta tattggggac atcgtggctc ttgggactgt gttcctgtcc atattctact ccgtcatctt tgccattggc ctgggtggaa atttgttgt agtgtttgccc ctccacca cgaagaagcc caagagtgtc accgacattt accctcctgaa cctggccttg tctgatctgc tgtttgtagc cactttgccc ttctggactc actatttgat aaatgaaaag ggctccaca atgccatgtg caaattcact accgccttct tcttcacgtg cttttttgga agcatattct tcataccgt catcagcatt gataggtacc tggccatcgt cctggccgcc aatcccatga acaaccggac cgtgcagcat ggcgtcacca tcagcctagg cgtctgggca gcagccattt tgggtggcagc acccagttc atgttcacaa agcagaaaaga aaatgaatgc ctgtgtgact acccggagt ccttcaggaa atctggcccg tgcctcgcaa tgtgaaaaca aatttcttg gttcctact cccctgtc attatgagtt atgtctactt cagaatcacc cagacgtgtt tttcctgcaa gaaccacaa aaagccaaag ccattaaact gaccctctg cttggtcctg tgttttctt cttctggaca ccctacaacg ttatgatttt cctggagacg cttaaagctt atgacttctt tcccagttgt gacatgagga aggatctgag gctggccctc agtgtgactg agcgggtgc attagccat tgttgccctga atcctctcat ctatgcattt gctggggaga agttcagaag atacctttac cacctgtatg gaaaatgcct ggctgtcctg tgtggggcgt cagtcacgt tgatttctcc tcacttgaat cacaagaagag caggcatgga agtgttctga ccagcaattt tacttaccac acgagtgatg gagatgcatt gctccttctc tgaagggaat cccaaagcct tgtgtctaca gagaacctgg agttcctgaa cctgatgctg actagtggag aagatttttg ttgttatttc ttacaggcac aaatgatgg acccaatgca cacaacaaa ccttagagtg ttgttgagaa ttgtgctcaa aatttgaaga atgaacaaat tgaactctt gaatgacaaa gagtagacat ttctcttact gcaaatgtca tcagaacttt ttggtttgca gatgacaaaa attcaactca gactagtta gtaaatgag ggtggtgaat atgttctata ttgtggcaca agcaaaaagg gtgtctgagc cctcaagtg aggggaacca gggcctgagc caagcta NP_001328.1 MDQFPESVTE NFEYDDLAE CYIGDIVFG TVFLSIFYSV IFAIGLVGNL LVVFALTNSK P KPKSVTDIYL LNLASDLLF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSMMN RTVQHGVITIS LGVMAAAILV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVTNFI GF LLPLLLIMSYC YFRIQTLES CKNHKKAKAI KLILLVIVF FLFWTPYNVM IFLETLLYD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRLYLHLYGK CLAVLCGRSV HVDFSSSEQ RSRHGSVLSS NPTYHTSDGD ALLLL atggaccag aagaaacttc agttatttg gattattact atgctacagag cccaaactct A gacatcaggg agaccactc ccatgttctt tacacctctg tcttcttcc agtcttttac acagctgtgt tctgactgg agtgcctggg aaccttgttc tcattgggagc gttgcatttc aaacccggca gccgaagact gatcgacatc ttatcatca atctggctgc ctctgacttc atthttcttg tcacattgcc tctctgggtg gataaagaag catctctagg actgtggagg acgggctcct tctgtgcaa agggagctcc tacatgatct ccgtcaatat gcactgcagt gtcctcctgc tcacttgcat gagtgtgac cgctacctgg ccattgtgtg gccagtcgta tcaggaaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttatc	Homo sapiens
250	3853	G Protein-Coupled Receptor	G Protein-Coupled Receptor GPR15	NM_005290	SHYVTRKGV STLAIIIGTF AACWMPFTLY SLIADYTPS IYTYATLLPA TYSIINPVI YAFRNQEIQK ALCLICCGCI PSSLAQRARS PSDV ggggcagatc cagattccct ttgcagtcga cgccaggcct tcaccatgga tcagttccct A gaatcagatga cagaaaaactt tgagtacgat gatctggctg aggcctgta tattggggac atcgtggctc ttgggactgt gttcctgtcc atattctact ccgtcatctt tgccattggc ctgggtggaa atttgttgt agtgtttgccc ctccacca cgaagaagcc caagagtgtc accgacattt accctcctgaa cctggccttg tctgatctgc tgtttgtagc cactttgccc ttctggactc actatttgat aaatgaaaag ggctccaca atgccatgtg caaattcact accgccttct tcttcacgtg cttttttgga agcatattct tcataccgt catcagcatt gataggtacc tggccatcgt cctggccgcc aatcccatga acaaccggac cgtgcagcat ggcgtcacca tcagcctagg cgtctgggca gcagccattt tgggtggcagc acccagttc atgttcacaa agcagaaaaga aaatgaatgc ctgtgtgact acccggagt ccttcaggaa atctggcccg tgcctcgcaa tgtgaaaaca aatttcttg gttcctact cccctgtc attatgagtt atgtctactt cagaatcacc cagacgtgtt tttcctgcaa gaaccacaa aaagccaaag ccattaaact gaccctctg cttggtcctg tgttttctt cttctggaca ccctacaacg ttatgatttt cctggagacg cttaaagctt atgacttctt tcccagttgt gacatgagga aggatctgag gctggccctc agtgtgactg agcgggtgc attagccat tgttgccctga atcctctcat ctatgcattt gctggggaga agttcagaag atacctttac cacctgtatg gaaaatgcct ggctgtcctg tgtggggcgt cagtcacgt tgatttctcc tcacttgaat cacaagaagag caggcatgga agtgttctga ccagcaattt tacttaccac acgagtgatg gagatgcatt gctccttctc tgaagggaat cccaaagcct tgtgtctaca gagaacctgg agttcctgaa cctgatgctg actagtggag aagatttttg ttgttatttc ttacaggcac aaatgatgg acccaatgca cacaacaaa ccttagagtg ttgttgagaa ttgtgctcaa aatttgaaga atgaacaaat tgaactctt gaatgacaaa gagtagacat ttctcttact gcaaatgtca tcagaacttt ttggtttgca gatgacaaaa attcaactca gactagtta gtaaatgag ggtggtgaat atgttctata ttgtggcaca agcaaaaagg gtgtctgagc cctcaagtg aggggaacca gggcctgagc caagcta NP_005290 MDQFPESVTE NFEYDDLAE CYIGDIVFG TVFLSIFYSV IFAIGLVGNL LVVFALTNSK P KPKSVTDIYL LNLASDLLF VATLPFWTHY LINEKGLHNA MCKFTTAFFF IGFFGSIFFI TVISIDRYLA IVLAANSMMN RTVQHGVITIS LGVMAAAILV AAPQFMFTKQ KENECLGDYP EVLQEIWPVL RNVTNFI GF LLPLLLIMSYC YFRIQTLES CKNHKKAKAI KLILLVIVF FLFWTPYNVM IFLETLLYD FFPSCDMRKD LRLALSVTET VAFSHCCCLNP LIYAFAGEKF RRLYLHLYGK CLAVLCGRSV HVDFSSSEQ RSRHGSVLSS NPTYHTSDGD ALLLL atggaccag aagaaacttc agttatttg gattattact atgctacagag cccaaactct A gacatcaggg agaccactc ccatgttctt tacacctctg tcttcttcc agtcttttac acagctgtgt tctgactgg agtgcctggg aaccttgttc tcattgggagc gttgcatttc aaacccggca gccgaagact gatcgacatc ttatcatca atctggctgc ctctgacttc atthttcttg tcacattgcc tctctgggtg gataaagaag catctctagg actgtggagg acgggctcct tctgtgcaa agggagctcc tacatgatct ccgtcaatat gcactgcagt gtcctcctgc tcacttgcat gagtgtgac cgctacctgg ccattgtgtg gccagtcgta tcaggaaat tcagaaggac agactgtgca tatgtagtct gtgccagcat ctggtttatc	Homo sapiens

251	3853	G Protein- Coupled Receptor GPR15	NP_005281.1	MDPEETSVYL KPGSRRLIDI VLLTTCMSVD PYCAEKKATP KIIFIVVAAF IYYIFDSYIR	DYYATSPNS FIINLAASDF RYLAIVWPVV IKLIWSLVAL LVSWLPEFTF RAIVHCLCPC	DIRETHSHVP IFLVTLPMLV SRKFRRTDCA IVTCYCCCIAR QEHYLPSSAIL LKNYDFGSST	YTSVFLPVFY DKEASLGLMR YVVCASIWFI IVVCASIWFI QLGMEVSGPL ETSDSHLTKA	TAVFLTGVLG TGSFLCKGSS SCLLGLPTLL KLCIAHYQQSG QLGMEVSGPL LSTFIHAEDF	NLVLMGALHF YMSIVNMHCS SRELTLLIDDK KHKKLKKSI AFANSCVNPF ARRRKRVSLS	Homo sapiens
252	3854	G Protein- Coupled Receptor GPR18	NM_005292	gaaagagaca ctggaaaacta acactgtttc agtgggaagtg agtatcatgc cccttttaac tatcttcata caagaagaga tataatgact gtacttctgc tcttgccctt acttaaaaac cagcaccacc ctgacctcaag actgacattt tcataatctc aaggatcatc tttcgctttc caccttccctc acaaatttcag cagaaaaagt atgaataata cgtcaatgga ttatcttcat	gaaagagaca ctgttttaag cagaaaagagc ctgaaaaatg ctaccaacaa agctcacatc attggattat accacggtaa ttaccctttc cagattcttg attagtctg acgtgcaaa cctctgctac attcttgaca tttttcttga cttcacggca atcacgctgc ctgatgctgg atgaacctca gctcgagtca ttccgatctg aggttctttc tattctgtat tttaaaaaaa	taaaagtcagc caacaaaaga tattttaaca ctcatctctc gctgtaaaat cagatgaata ttgttaacat ccatctatat gaatgtttta gagctctcac acagatacat ccgtgctggc tgctctataa tcatctatct ttcctttgtt ggaactctaa tgggtcaggt gaacggggga gcacgtgtct ttagtgtcat gtagctctac atttcaatcc atactatca agtcaccttt aaaaaa	tccagggagc attaaactca attgtgacat aagcacaca cttgtctct tggttgctg tgagacctg ctacatccg gagtagcact agaagattt gaaagagga gaaagagga ggcaactcca gcaatcagga ggcagcctt ccattgtctc tgagacctg ctatcgacag atgactttg tcattcatgc taa	tacagctgat tatgtccct gctactgttg aaaagctgaa ggctgacct attaccctc acagctgtg tccactgct atagtcacct ggaagaggtc tggtgcactc	tgatgataag ggtgacctta cattgcaagg gaaatctata caatactttc agctattctt caacctttc gtgaccttgc cactaaggct tggtgcactc	Homo sapiens

253	3854	G Protein- Coupled Receptor GPR18	NP_005283.1	<p>MITLNNQDQP VPFNSSHPDE YKIALVFPYS CIFIIGLFVN ITALWVFSCT TKKRRTVTIY P</p> <p>MMNVALVDLI FIMTLPRMF YYAKDEWPFPG EYFCQILGAL TVFPYSIALW LLAFISADRY</p> <p>MAIVQPKYAK ELKNWCKAVL ACVGWIMTL TTTTPLLLLY KDPDKDSTPA TCLKISDIY</p> <p>LKAVNVNLTL RLTFEFLIPL FIMIGCYLVI IHNLLHGRTS KLPKPKVEKS IRIITLLVQ</p> <p>VLVCFMPFHI CFAFLMLGTG ENSYNPWGAF TTFLMNLSTC LDVILYIYS KQFOARVISV</p> <p>MLYRNYLRSM RRKSFRSGSL RSLSNINSEM L</p>	Homo sapiens
254	3855	G Protein- Coupled Receptor GPR19	NM_006143	<p>aattaagaga aaaaaagtga atatgtgttt tgctcacaga atggataaca gcaagccaca A</p> <p>tttgattatt cctacacttc tgggtgccct ccaaaacgcg agctgcactg aaacagccac</p> <p>acctctgcca agccaatacc tgatggaatt aagtggaggag cacagttgga tgaagcaaca</p> <p>aacagacctt cactatgtgc tgaaccgcgg ggaagtggcc acagccagca tcttcttggg</p> <p>gattctgtgg ttgttttcta tcttcggcaa tccctgggtt tgtttggtca tccataggag</p> <p>taggaggact cagtctacca ccaactactt tgtgggtccc atggcatgtg ctgacctctt</p> <p>catcagcgtt gccagcacgc ctttcgtcct gctccagttc accactggaa ggtggacgct</p> <p>gggtagtgca acgtgcaagg ttgtgcgata ttttcaatat ctcactccag gtgtccagat</p> <p>ctacgttctc ctctccatct gcatagaccg gttctacacc atcgtctatc ctctgagctt</p> <p>caaggtgtcc agagaaaaag ccaagaaaat gattgcggca tctgtgatct ttgatgcagg</p> <p>ctttgtgacc cctgtgctct ttttctatgg ctccaactgg gcaggtcatt gtaactattt</p> <p>cctccctccc tcttgggaag gcactgccta cactgtcatc cacttcttgg tgggctttgt</p> <p>gattccatct gtctcataa ttttatttta ccaaaaggct ataaaatata ttggagaaat</p> <p>aggcacagat gccgaacgg tgaggagac atgaacatt gtccctcgga caaaagtga</p> <p>aactataaag atgttctcta ttttaaatct gttgtttttg ctctctggc tgccttttca</p> <p>tgtagctcag ctatggcacc cccatgaaca agactataag aaaagttccc ttgttttcac</p> <p>agctatcaca tggatatcct ttagttcttc agcctctaaa cctactctgt attcaattta</p> <p>taatgccaat ttctggagag ggatgaaga gactttttgc atgtcctcta tgaatgtta</p> <p>ccgaagcaat gcctatacta tcacaacaag tccaaggatg gccaaaaaaa actacgttgg</p> <p>catttcagaa atcccttcca tggccaaaac tattaccaa gactcgatct atgactcatt</p> <p>tgacagagaa gccaaaggaaa aaaagcttgc ttggcccat aactcaaat caccaaaatc</p> <p>ttttgtctaa gttctcattc tttcaattgt tatgcaccag agattaaaaa gctttaacta</p> <p>taaaaacaga agctatttac atatttgttt tcaactcaact ttcaaaggga aatgttttat</p> <p>tttgtaaaat gcattcattt gttactctg</p>	Homo sapiens
255	3855	G Protein- Coupled Receptor GPR19	NP_006134.1	<p>MVFAHRMDNS KPHLIPTLL VPLQNRSGTE TATPLPSQYL MEISEHSWM SNQTDLHYVL P</p> <p>KPGEVATASI FFGILWLFSI FGNSLVCLVI HRSRRTQSTT NYFVVSMACT DLIISVASTP</p> <p>FVLLQFTTGR WTIGSATCKV VRYFQYLTPG VQIYVLLSIC IDRFYTIYVP LSFKVSREKA</p> <p>KKMIAASWIF DAGFVTPVLF FYGSNWDSHC NYFLPSSWEG TAYTVIHFLV GFVIPSVLII</p> <p>LFYQKVIKYI WRIGTDGRTV RRTMNIPTPT KVKTIKMLI LNLLFLLSWL PFHVAQLWHP</p> <p>HEQDYKKSSL VFTAITWISF SSSASKPTLY SIYNANFRRG MKETFCMSSM KCYRSNAYTI</p> <p>TTSSRMAKKN YVGISEIPSM AKTITKDSIY DSFDREAKEK KLAWPINSNP PNTFV</p>	Homo sapiens
256	3856	G Protein- Coupled Receptor GPR2/CCR10	NM_016602	<p>agagatgggg accgaggcca cagagcaggt ttcctggggc cattactctg gggatgaaga A</p> <p>ggacgcatac tcggctgagc cactgcggga gctttgctac aagccgatg tccaggcctt</p> <p>cagccggggc ttccaaccca gtgtctccct gaccgtggct gcgctgggtc tggccggcaa</p> <p>tggcctggct ctggccacc accctggcagc ccgacgcgca gcgcgctcgc ccacctctgc</p>	Homo sapiens

257	3856	G Protein- Coupled Receptor GPR2/CCR10	NP_057686.1	<p>ccacctgtctc cagctgggcc ttgctgtgacct cttgtgtggcc ctgactctgtc ccttcggcggc agcaggggct cttcagggct ggagtctggg aagtggccacc tgcgcacca tctctggcct ctactcgcc tcttccacg cggcttctt cttctgtgccc tgtatcagcg ccgaccgcta cgtggccatc gcgcagcgc tcccagcggc gccggggccc tccactcccg gccgcgcaca cttggctcc gtcactgtgt ggtgctgtc actgctctg gcgtgctctg cgtgctctt cagccaggat ggcagcggg aaggccaacg acgctgtcg ctcactctcc ccgaggcct cacgcagacg gtgaaggggg cgagcgccgt ggcgcaggtg gccctgggct tgcgctgcc gctggcgctc atggtagcct gctacgcgt tctggcgccg acgctgtgg ccgccagggg gcccagcgc cggcgtgccc tgcgctgct ggtggctctg gtggcgccct tctgtgtgct gcagctgccc tacagcctcg cctgtgctg gatactgac gatctactgg ctgcgcgga gcgagctgc cctgcagca aacgcaagga tgcgcactg ctggtgacca gggcttggc cctgccccg tgtggcctca atccgcttct ctacgccttc ctggcgctgc gcttccgcca ggacctggg aggtgtgtac ggggtgggag ctgcacctca gggcctcaac cccgcggcg ctgccccgc cggccccgc ttcttctcg ctacgctccc acggagacc acagtctctc ctggacaac taggctgccc aatctagagg agggggcagg ctgagggtcg tgggaaagg gagtaggctg ggaacactg agaaagaggc agggacctaa agggactacc tctgtgctt gccacattaa attgataaca tggaaatgaa aaaaaaaaaa aaaa</p>	Homo sapiens
258	3857	G Protein- Coupled Receptor GPR20	NM_005293	<p>atgcctctctg tgtctccagc gggggccctcg gccggggcag tccccaatgc caccgcagtg A aacaagtgcc ggaccaatgc cagcgggctg gagtgcccc tgttccacct gtttgccccg ctggacgagg agctgcatgg cacttccca gccctgtgcg tggcgctgat ggcggtgac ggagccatct tctggcagg gctggtgctc aacgggctgg cgtgtacgt cttctgctgc cgcacccggg ccaagacacc ctacgtcatc tacaccatca acctggtgtt gaccgatcta ctggtagggc tgtccctgcc cagcgcttc gctgtgtact acggcgccag gggctgacctg cgctgtgct tccgcacgt cctcggttac tctctcaaca tgcactgctc catctcttc ctcacctgca tctgcgtgga ccgctacctg gccatctgct ggcgcgaag tcccgccgc tgccgccagc ctgctgtgca caggccctg tgcgcttgc tgtggctggc cgccgggtgccc gtcacctctg cgggtgctgg cgtgacaggc agccggccct gctgcctgt ctttgcctg actgtcctgg agtctctgct gccctgtgct gtcacagcg tgtttaccgg ccgcatcatg tgtgactgt cgcggccggg tctgtccac cagggtgccc agcgcgctg gcgggccatg cagctcctgc tcaagtgct catcatcttt cctgtctgct tcaagccct ccacgcccc caagtggccg tggcgctgtg gccgacatg ccacaccaca cagacctgt ggtctaccac gtggccgtga cctcagcag cctcaacagc tgcattgacc ccactgtcta ctgcttctg accagtggct tccaggccac cgtccgaggc ctcttcggcc agcacggaga gcgtgagccc agcagcgggtg acgtggtcag catgcacagg agctccaaag gctcaggccc tcatcacatc</p>	Homo sapiens

259	3857	G Protein- Coupled Receptor GPR20	NP_005284.1	ctcagtgccg gccctcacgc cctcacccag gccctggcta atggggccga ggcttag	Homo sapiens
				GAIFLAGLVL NGLALVFCC RTRAKTPSVI YTNLVVTDL LVGLSLPTRE AVYGGARGCL RCAPFHVLGY FLNMHCSILE LTCICVDRL AIVRPEAPAA CRQPACARAV CAFWLAAGA VTLSVLGVTG SRPCCRFEAL TVLEFLPLL VISVFTGRIM CALSRPGLLH QGRQRRVRAM QLLLTVLIIF LVCFTPEHAR QVAVALWPDH PHHTSLVVYH VAVTLSSLNS CMDPIVYCFV TSGFQATVRG LFGQGEREP SSGDVSMHR SSKGSGRHHI ISAGPHALTQ ALANGPEA	
260	3858	G Protein- Coupled Receptor GPR21	NM_005294	atgaactcca ccttgatgag taatcacagc agccacctt ttgacctctt ggcatttggc A tatttggaaa ctgtcaattt ttgctttttg gaagtattga ttattgtctt tctaactgta ttgattatt ctggcaacat cattgtgatt ttgttattc actgtgcacc ttgttgggac catcacata caagttattt tatccagact atggcatatg ctgacctttt tgttggggtg agctgctggg tcccttcttt atcaactctc catcacccc ttccagtaga ggagtccttg acttgccaga tatttggtt tttagtatca gttctgaaga cgctctccat ggttctctg gcctgtatca gcatgtag atacattgcc attactaac cttaaccta taatactctg gttacacct ggagactacg cctgtgtatt ttccgtattt ggctatactc gacctggtc ttccctgctt cctttttcca ctggggcaaa cctggatatac atggagatgt gttcagtg tgtgctgggt cctggcacac cgactcctac ttacacctgt tcatcgtgat gatgtatat gccccagcag cccttattgt ctgcttcacc tatttcaaca tcttccgcat ctgccaacag cacacaaagg atatcacgca aaggcaagcc cgcttcagca gccagagtg ggagactggg gaagtgcagg cctgtcctga taagcgtat gccatggctc tgttccgaat cactagtga ttttacatcc tctggttgc atatatcatc tactcttctg tggaaagctc cactggccac agcaaccgtc tgcctcctt ctgaccacc ttgcttgcta ttgtaaacag tttctgcaac tgtgtaatt atagtctctc caacagtgta ttccaaaag gactaaaagc cctctcaggg gctatgtgta cttctgtgac aagtcagact acagccaag acccttacac agttagaagc aaaggccctc ttaatggatg tcatatctga	Homo sapiens
261	3858	G Protein- Coupled Receptor GPR21	NP_005285.1	MNSTLDGNQS SHPFCLLAG YLETVNFCLL EVLIIIVFLTV LIISGNIIVI FVHCAPLLN P HHTTSYFIQT MAYADLFVG SCVVPSSLIL HHPLPVEESL TCQIFGFVVS VLKSVSMASL ACISIDRYIA ITKPLTYNTL VTPWRLRLCI FLIWLYSTLV FLPSFFHWGK PGYHGDVFEQW CAESWHTDSY FTLFIVMMLY APAALIVCFT YFNIFRICQQ HTKDISERQA RFSSQSGETG EVQACPDKRY AMVLEFRITSV FYIILWPYII YFLLESSTGH SNRFASFLT WLAISSFCN CVIYSLNSV FORGLKRLSG AMCTSCASQT TANDPYTVRS KGPLNGCHI	Homo sapiens
262	3859	G Protein- Coupled Receptor GPR22	NM_005295	atgtgtttt ctccattct gaaatacaac atgcagtcg aatctaactc tacagtgcga A gatgacatg atgacatcaa caccaatag taccacacc tatcatatcc gtttagcttt caagtgtctc tcaccggatt tcttatgta gaaattgtg ttggacttgg cagcaacctc actgtattgg tactttactg catgaaatcc aacttaatac actctgtcag taacattatt acaaatgaatc ttcatgtact tgatgtaata atttgtgtg gatgtattcc tctaactata gttatccctc tgctttcact ggagagtaac actgctctca ttgtctgtt ccatgaggct tgtgtatctt ttgcaagtgt ctcaacagca atcaacgtt ttgtctatcac ttggacaga tatgacatct ctgtaaaacc tgcaaaccca attctgacaa tgggcagagc tgtaattgta atgatatacca ttggatttt ttctttttc tcttctcga ttcttttat tgaggtaaat	Homo sapiens

263	3859	G Protein-Coupled Receptor GPR22	NP_005286.1	<p> tttttcagtc ttcaaaagtgg aaatacctgg gaaaaaaga cactttttatg tgtcagtaca aatgaatact acactgaact gggaatgtat tatcactgt tagtacagat cccaatatctc tttttcactg ttgtagtaat gtaatacaca tacaccaaaa tacttcaggc tcttaatat cgaataggca caagatttc aacagggcag aagaagaaag gcagtggtag gagaaatgta tctctaacca cacaacatga ggctacagac atgtcacaaa tccggcgagc tgtgaaacga gtctttgggtg taagaacttc agtttctgta ataattgccc tccggcgagc gattatttct cacgtgaac gacgagaag acaaaagaga gtcttcagga tctctttatt gattatttct acatttcttc tctgctggac accaatttct gtttaataa ccaccatttt atgtttaggc ccaagtacc ttttagtaaa attagattg tgttttttag tcatggctta tggaaacaact atatttcacc ctctattata tgcattcact agacaaaaat ttcaaaaggc cttgaaaagt aaaatgaaaa agcgagttgt tctatagta gaagctgac ccctgcctaa taatgctgta atacacaact cttggataga tcccaaaaaga acaaaaaaaa ttacctttga agatagtga ataagagaaa aacgtttagt gcctcagggt gtacacagact ag </p>	Homo sapiens
				<p> MCFSPILEIN MQSESNIIVR DDIDDINTNM YQPLSYPLSF QVSLTGFLML EIVLGLGSNL P TVLVLYCMKS NLINSVSNII TMNLHVLVDVI ICVGCIPLTI VILLLSLESN TALICCFHEA CVSEFASVSTA INVEAITLDR YDISVKPANR ILTMGRAVML MISIWIFSF SFLIPFIEVN FFSLQSGNTW ENKTLICVST NEYYTELGMV YHLVQIPIF FFTVVMMLIT YTKILQALNI RIGTRFSTGQ KKKARKKKTII SLTQHEATD MSQSSGGRNV VFGVRTSVSV IIALRRAVKR HRERERQKR VFRMSLLIIS TELLCTWPIS VLNTTILCLG PSDLLVKLRL CFLVMAYGTT IFHPLLYAFT RQKFQKVLKS KMKKRVWSIV EADPLPNNAV IHNSWIDPKR NKKITFEDSE IREKRLVPQV VTD </p>	
264	3860	G Protein-Coupled Receptor SLC/MCH1	NM_005297	<p> atgttgtgtc ctccaagac agatggctca gggcaactctg gtaggattca ccaggaaaact A catggagaag ggaagaggga caagattagc aacagtgaag ggaggagaga tgggtgggaga ggattccaga tgaacgggtgg gtcgctggag gctgagcatg ccagcaggat gtcagttctc agagcaaaagc ccatgtcaaa cagccaacgc ttgtctcttc ttgtccccagg atcacctcct cgcaagggga gcatctccta catcaacatc atcatgcctt cgggtgttcgg caccatctgc ctcctgggga tcatcgggaa ctccacgggc atcttcggcg tcgtgaagaa gtccaagctg cactgggtga acaacgtccc cgacatcttc atcatcaacc tctcggtagt agatctcctc tttctcctgg gcatgcccct catgatccac cagctcatgg gcaatggggt gtggcacittt ggggagagcca tgtgcacctt catcacggcc atggatgcca atagtcatgt caccagcacc tacatcctga ccgcatggc cattgaccgc ttctggccca ctgtccacc catctcttcc acgaagttcc ggaagccctc tgtggccacc cttgtgatct gcctcctgtg ggcctctctcc ttcatcagca tcacctctgt gtggctgtat gccagactca tccccttccc aggaggtgca gtgggctgag gcatagcctt gcccaaccca gacactgacc tctactggtt caccctgtac cagtttttcc tggcctttgc cctgcctttt gtgtcatca cagccgcata cgtgaggatc ctgcagcgca tgacgtcctc agtggccccc gcctcccagc gcagcatccg gctgcggaca aagaggggtga cccgcacagc catgccatc tgtctggtct tctttgtgtg ctgggcaccc tactatgtgc tacagctgac ccagttgtcc atcagccgcc cgaccctcac ctttgtctac ttatacaatg cggccatcag cttgggctat gccaacagct gcctcaaccc ctttgtgtac atcgtgtctc gtgagacgtt ccgcaaacgc ttgtcctctg cgggtgaagcc tgcagcccg ggcagcttc gcgctgtcag caacgctcag acggtgacg aggagaggac agaaagcaaa </p>	Homo sapiens

265	3860	G Protein-Coupled Receptor SLC/MCH1	NP_005288.1	gagacaccta	MLCPSTKTDGS	GHSGRHQET	HGEGKRDKIS	NSEGRENGGR	GFQMNNGSLE	AEHASRMSVL	P	Homo sapiens
266	3861	G Protein-Coupled Receptor GPR25	NM_005298		atggccccc	cagagccctg	gagcccccag	ccgggggtcag	cgccctggga	ctactcgggg	A	Homo sapiens
					ttggacggcc	tggagagact	ggagctgtgt	ccggccgggg	acctgccccta	cggtacagtc		
					tacatccccg	cgcctacct	ggcgcccttc	ggcgtggcc	tgctgggcaa	cgcctttgtg		
					gtgtggctgc	tggcggggcg	ggggggcccg	ggcgggctgg	tggtacacct	cgtgctgcac		
					ctggcgccag	ctgacctggg	cttcgtgctc	acgtgcccgc	tggtggccgc	ggcgggcggt		
					agggcgccgt	ggcgttcgg	cgatggcctc	tgcaagctca	gcacgttcgc	gctggcgggc		
					acgcgctcgg	ggggcgcgct	gctgctggcg	ggcatgagcg	tggaaccgta	cctggcgctg		
					gtgaagctgc	tcgaggcgag	ggcactgcgc	accccgcgct	ggcgtgggc	ctcgtgctgc		
					ggcgtctggg	ccgtggcgct	gctggccggc	ctgcccctcc	tggtctaccg	gggtttcgag		
					ccctgcctg	ggggccagga	cagccagctgc	ggcgaggagc	ctcccacgc	cttcaggggc		
					ctcagcttgc	tgctgctgct	gctgaccttc	gtgctgcccc	tggtcgtcac	cctctctctc		
					tactgccgca	tctcgcccg	cctgcgacgg	ccgcgcgacg	tggtgcgggc	ccggaggagac		
					tcgctgcgca	tcattctgc	cactgagagc	acgtttgtgg	gtcctctggc	gccttcacgc		
					ggcctgcggg	ccgtcttcca	cctggcgcg	ctggggggcg	tgccgctgcc	gtgccccctg		
					ctgctggcgc	tgcgtggggg	cctcaccatt	ggcactctgc	tgcccttcgt	caacagctgc		
					gccaaaccgc	tcattctacct	cctgctggac	cgctcattcc	gagcccgggc	gctggacggg		
					gcctgcgggc	gcaccggccg	cctggcgcg	aggatcagct	cagcctctctc	gctctccagg		
					gacgacagtt	ccgtgttccg	ttgcggggcc	caggcccgca	acactgcctc	ggcctctcgg		
267	3861	G Protein-Coupled Receptor GPR25	NP_005289.1	tag	MAPTEPWSPS	PGSAPWDYSG	LDGLEELELC	PAGDLPYGV	YIPALYLAAF	AVGLLGNFV	P	Homo sapiens
					VWLLAGRRGP	RRLVDTEVLH	LAADLGFLV	TLPLWAAAA	RRWPFGDGL	CKLSTFALAG		
					TRSAGALLLA	GMSVDRLAV	VKLLLEARPLR	TPRCASVASC	GVMAVALLAG	LPSIVYRGLQ		
					PLPGGQDSQC	GEPSHAFQG	LSLLLLLLTF	VLPLVTLF	YCRISRRRLR	PPHVGRRARN		
					SLRIIFAIES	TFVGSWLPFS	ALRAVFHLAR	LGALPLPCPL	LLALRWGLTI	ATCLAFVNSC		
					ANPLIYLLLD	RSFRARALDG	ACGRTGRLAR	RISSASSLSR	DDSSVFCRA	QAANTASASW		
268	3862	G Protein-Coupled Receptor GPR3	NM_005281		atgatgtggg	gtgcaggcag	ccctctggcc	tggtctctcag	ctggctcagg	caactgaaat	A	Homo sapiens
					gtaagcagcg	tgggcccgag	agagggggcc	acaggtccag	ccgcaccact	ggcctgcct		
					aaggcctggg	atgtgtgtgt	ctgcatctca	ggcacccctgg	tgctctcgca	gaatggcgcta		
					gtggtggcca	tcategtggg	cactcctgcc	ttccgtggcc	ccatgttct	gctgggtgggc		
					agcctggccg	tggcagacct	gctggcaggc	ctgggctctg	tcctgcactt	tgctgctgtc		
					ttctgcatcg	gctcagcgga	gatgagcctg	gtgctgtgtg	gcgtgctggc	aatggccttt		
					accgccagca	tcggcagctct	actggccatc	actgtcgacc	gctacctttc	tctgtacaat		

269	3862	G Protein- Coupled Receptor GPR3	NP_005272.1	gacctaccct actattcaga gacaaacagt acacggacct atgtgatgct ggccttagtg tggggaggtg cctgggcct ggggtgctg cctgtgctg cctggaactg cctggatggc ctgaccacat gtggcgtggt ttatccact tccaagaacc atctgtagt tctggccatt gcctttctca tgggttttgg catcatgctg cagctctacg cccaaatctg ccgcatcgtc tgccgccatg ccacagagat tgcccttcag cggcacctgc tgcctggcct ccactatgtg gccacccgca agggcatgac cacactggcc gtgggtgctg gaggccttgc cgcctgctgg ttgcccttca ctgtctactg cctgctgggt gatgccact ctccacctct ctacacctat cttaccttgc tccctgccac ctacaaactc atgatcaacc ctatcatcta cgccttcgc aaccaggatg tgcagaaagt gctgtgggt gctgtgctg gctgttctc ttccaagatc ccctccgat cccgctccc cagtgatgc tag MMWAGSPLA WLSAGSGNV VSSVGPAGEP TGAAPLPSP KAWDVVLCS GTLVSCENAL P VVAIVGTPA FRAPMFLV LGSLVLAAG LGLVLHFAAV FCIGSAEMSL VLVGLAMAF TASIGSLAI TVDRLYSLYN ALTYSETTV TRTYVMLALV WGAIGLGLL PVLAWNCLDG LTTGCVVYPL SKNHLVVLAI AFFMVFGLM QLYAQICRIV CRHAQIALQ RHLLPASHYV AFRKGIATLA VVLGAFAACW LPFTVYCLLG DAHSPPLYTY LTLPATYNS MINPIIYAFR NQDVQKVLWA VCCCCSSKI PFRSRSPSDV	Homo sapiens
270	3863	G Protein- Coupled Receptor GPR31	NM_005299	atgccattcc caaactgctc agccccagc actgtggtg ccaacagtgt ggggtcttg A ctggggctgg agtgtggct gggctgctg ggcaacgcgg tggcgtgtg gacctctctg ttccgggtca ggggtggaa gccgtacgt gtctacctgc tcaacctggc cctgctgac ctgctgttgg ctgctggct cctttctctg gccgcttct accctgacct ccaggcttgg catctgggct gtgtggctg ctgggcccc gcttctctc tggacctcag ccgcagcgtg gggatggct tctggcgcg cgtggcttg gaccgtacc tccgtgtgt ccacctctgg cttaaggctc acctgctgc tctcaggcg gccctgggg tctggggct cgtctggctc ctgatggctg cctcactcg cccgggcttg ctcatctctg aggcggccca gaactccac aggtgccaca gtttctactc cagggcagac ggctccttca gcactatctg gcaggaaagca ctctcctgcc ttcagtgtgt cctccccctt ggctcatcg tgttctgcaa tgcaggccatc atcaggggctc tccagaaaag actccgggag cctgagaaac agcccaagct tcagggggccc caggcactgg tcaccttgggt ggtggtgctg ttgtctctg gcttctgccc ctgcttctg gceagagtc tgatgcacat ctccagaat ctggggagct gcagggccct ttgtgcagt gctatacct cggatgtcac gggcagcctc acctacctgc acagtgtcgt caacccctg gtatactgct tctcagccc cactctcag agctccatc ggagggtctt ccacacctc cgaggcaaa ggcaggcagc agagccccc gatttcaacc ccagagactc ctattctga MPFNCAPS TVVATAVGV LGLECGGLL GNAVALWTEL FRVRVWKPYA VYLLNLALAD P LLLAACLPLF AAFYLSLQAW HLGRVGCWAL RFLDLRSV GMFLAAVAL DRYLRVWVHR LKVNLSPQA ALGVSGLVWL LMVALTCPGL LISEAAQNST RCHSFYSRAD GSFSIIWQEA LSCLOFVLPF GLIVFCNAGI IRALQKRLRE PEKQPKLQRA QALVTILVVVL FALCFELPCL ARVLMHIFQN LGSCRALCAV AHTSDVTGSL TYLHSAVNPV VYCFSSPTFR SSYRRRVFHTL RGKQAAEPP DFNPRDSYS	Homo sapiens
272	3864	G Protein- Coupled Receptor	NM_005282	ctggtgacct tacttatctc tgttgcttctc tggggctccta ggaaatgcca gcactcccac A ccacattgcc tgaactttcc aacactccct agctgcgctg tgtcctatct caacacttcc tcattgattt cttgtgtctt ctagaacatt cccccgcat tattacttca atatggctac	Homo sapiens

GPR4

acatacttcc taattgccct gcaaacccatc tccttctcac cattgcccag cgatgtcttc
gtctcctcca taaacactcc cgagagaccaa tttttgtgtc acccccatcac tcccteqttg
acacactgac tccatacata acctccttga aaacctctt tattaatctc accatcctcc
agacttccct cctgtcataa ttccatccct cctccaaact ttccctctca agctctgccc
ttccagccc agccagcct acccaacctc atctcttccc tgtagaccac atcccaccat
gttcccttga gctcccaagg aaggggctca gggggcccca tggcctcccc ctccctgtgg
ccccacagcc ccgttggccc aggggaagcg cccagaagc cgaagtgtccc accatgggca
accacacgtg ggagggtgc cacttggact cgcgctgga ccacctcttt ccgccatccc
tctacatctt tgtcatcggc gtggggctgc ccaccaactg cctggctctg tggcgccct
accgccaggt gcaacagcg aacgagctgg gcgtctacct gatgaacctc agcatcgccg
acctgtgtga catctgacg ctgcgctgtt ggttgacta cttcctgcac cagacaact
ggatccacgg ccccggttcc tgaagctct ttgggttcat cttctacacc aatatctaca
tcagcatcgc cttcctgtgc tgcactctgg tggaccgcta cctggctgtg gccaccacc
tcgccttcgc ccgcctgcgc cgcgtcaaga ccgcctggc cgtgagctcc gtggtcttgg
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acaaccacac cttctgcttt gagaagtccc ccatggaagg ctgggtggcc tggatgaacc
tctatcgggt gttcgtgggc ttcctcttcc cgtggcgct catgctgctg tcgtaccggg
gcatcctgcg ggcctgcgg ggcagctgtt ccaccgagcg ccaggagaag gccaagatca
agcggctggc cctcagctc atcgccatcg tgcgtgtctg ctttgcgcc tatcacgtgc
tcttgcgtgc ccgcagcgc atctacctg gccgccccg ggcactgggc ttcgaggagc
gcgtcttttc tgcataccac agctcactgg ctttaccag cctcaactgt gtggcgagcc
ccatcctcta ctgcctggtc aacgaggcg cccgcagcga tgtggccaag gccctgcaca
acctgctccg ctttctggcc agcgacaagc ccaggagat ggcctaatgcc tcgctacccc
tggagacccc actcactcc aagaggaaca gcacagctaa agccatgact ggcagctggg
cgccactcc gccctccag gggaccaggg tgcagctgaa gatgctgccg ccagcacaat
gaaccccgag tggcacagaa tcccagttt tccctctca tccacagtc ccttctctcc
tggctgtgtg tatgcaaat ttatggaata aggctgtgt taatattcat aagaatacaa
gaacttagga agagttaggt tgggtgttca ctggtcaacc tttgtgctcc cagatcccat
cacagtttgg cgatttgtga gggcctcctg aaggaggaga tgagttaata tatttttttg
gagacagggt ctcactgtgt tggccaggct ggagtgcagt agtgagtcg tggctcactg
cagcctccac ctcctgggt ctcacggat cttccacat cagcctcccc agtagctggg
accacaaaatg tgagcccacc catgctggc taatttttgt actttttgta taaatggagt
ctcactatgt ttcccaggc tgatcttgaa ctcctgggct caagagatcc tccctgcttg
gcctcccaaa gtgctcagat tagagatgtg agccgcatg tctggccaga taaattaagt
caaacatttg gtttccagaa aataagaca aatagagaag gttagatttt ttttttcca
acaagtggat aaaagtctgt gactcggggg aaagtggag gagaatgca gccgatatag
agtcattatg ttgcaaacg ccttggtcat acaggccagg gaacataaga ccgcaattct
aagtttctag ataaacagcg atctccaagt caagactgag gatgaagagg gagaatgtca
gaactcaagt gaagggcaat cagggcagac tgcctggagg agtgatgcca gaaggtttgg
gaagaagggt tgggacaaga agaaagggt tttattcatt cattcaacag aggtttatgt
aggcactgt gctgggtggg gctgggggaca caacaatgac tgaggcagcc tggccttgcc

273	3864	G Protein- Coupled Receptor GPR4	NP_005273.1	ttcacaggcg tcaccatata caagtaata aaaaatatgt aatgtttgga attgct MGNHTWEGCH VDSRVDHLFP PSLYIFVIGV GLPTNCLALW AAYRQVQQRN ELGVYLMNLS P IADLLYICTL PLWVDYFLHH DNWHGPGSC KLFGEFITYN IYISIAFLCC ISVDRYLAVA HPLRFARLR VKTAVAVSSV VWATELGANS APLFHDELFR DRYNHTFCFE KFPMEGWVAW MNLRYFVGF LFPWALMLS YRGLRAVRG SVSTERQEKA KIKRLALS LI AIVLVCFAPY HVLNLSRSAL YLGRPWDCGF EERVFSAYHS SLAFTSLNCV ADPILYCLVN EGARSDVAKA LHNLRLFLAS DKPQEMANAS LTLETPLTSK RNSTAKAMTG SWAATPPSQG DQVQLKMLPP AQ	Homo sapiens
274	3866	G Protein- Coupled Receptor GPR6	NM_005284	atgaacgcga gcgcgcctc gctcaacgac tcccaggtgg tggtagtggc ggccgaagga A gcgcgcgcgc gcgcacagc agcagggggg cggacacgg gcgaatgggg acccctgct gcgcgcctc taggagccgc cggcggagct aatgggtctc tggagctgtc ctgcagctg tcgcgcgcgc caccgggact cctgtgcga cgggtgaatc cgtgggacgt gctcctgtgc gtgtcgggga cagtgtgcgc tggagaaaac gcgctggtgg tggcgctcat cgcgtccact ccgcgcgtgc gcacgcccac gtctgtgctg gtaggcagcc tggccaccgc tgacctgttg gcgcgcgtgt gcctcatctt gcactttgtg ttccagtact tggtgccctc ggagactgtg agtctgctca cgggtggcct cctcgtggcc tctctgcgc cctctgtcag cagcctgtg gccattacgg tggaccgcta cctgtccctg tataacgcgc cctgtgctc ctgcgcgcgc accctgttgg gcgtgcacct cctgttgcgc gccacttga cgtgtccct aggcctgggg ctgctgcgcgc tgctgggctg gaactgcctg gcagagcgcg cgcctgtcag cgtggtgcgc ccgcgtgcgc gcagccacgt ggtctgtctc tccgcgcct tctcatggt cttcggcactc atgctgcacc tgtacgtgcg catctgccag gtggtctggc gccacgcga ccagatcgcg ctgcagcagc actgcctggc gccaccccat ctgcctgcca ccagaaaggg tgtgggtaca ctggcgttgg tgctgggcac ttctggcgcc agctggctgc ccttcgccat ctattgcgtg gtgggcagcc atgaggaccc ggcggtctac acttacgcca cctgtgtgcc cgcacacctac aactccatga tcaatcccat catctatgcc ttccgcaacc aggagatcca gcgcgcctg tggtcctcgc tctgtggctg ttccagtc aaagtgcct ttcgttccag gtctccagc gaggtctga	Homo sapiens
275	3866	G Protein- Coupled Receptor GPR6	NP_005275.1	SQVVVVAEG AAAATAAGG PDTGEWPPA AAALGAGGGA NGSLELSSQL P SAGPPGLLP AVNPWDVLLC VSGTVIAGEN ALVVALIAST PALRTPMFVL VGSLATADLL AGCGLILHFV FQYLVPSERV SLITVGLVA SFAASVSSLL AITVDYLSL YNALTYYSRR TLIGVHLLA ATWTVSLGLG LLPVIGWNL AERAACSVVR PLARSHVALL SAAFFMVEGI MLHLYVRICQ VWRHAHQIA LQHCILAPPH LAATRKGVGT LAVVLGTFGA SWLPFAIYCV VGSHPDPAVY TYATLLPATY NSMINPIYA FRNQEIQRAL WLLLCGCFQS KVPFRSRSPS EV	Homo sapiens
276	3867	G Protein- Coupled Receptor GPR7	NM_005285	atggacaacg cctcgttctc ggagccctgg cccgcacaacg catcggggccc ggaccggcg A ctgagctgct ccaacgcgc gactctggcg cgcctgcggg cgcctgtggc ggtggctgta ccagttgtct acgcggtgat ctgcgcgtg ggtctggcg gcaactccgc cgtgctgtac gtgttgctgc gggcgccccg catgaagacc gtcaccaacc tgttcatcct caacctggcc atcgccgacg agctcttcac gctgtgtgctg cccatcaaca tcgccgactt cctgctgcgg cagtgccctc tcggggagct catgtgcaag ctcatcgtgg ctatcgacca gtacaacacc	Homo sapiens

277	3867	G Protein- Coupled Receptor GPR7	NP_005276.1	<p>ttctccagcc tctacttctt caccgtcatg agcgcgacc gctacctggt ggtgtggcc</p> <p>actgcggagt cgcgcgggt ggcggccgc acctacagc ccgcgcgcg ggtgacctg</p> <p>gccgtgtgg ggatcgtcac actcgtcgtg ctgccctcg cagtcttcgc ccggtagac</p> <p>gacgagcagg gccggcgcca gtgcgtgcta gtctttccgc agcccgaggc cttctggtg</p> <p>cgcgagacc gcctctacac gctcgtgctg ggtctcgcca tccccgtgc caccatctgt</p> <p>gtcctctata ccacctgct gtccgggctg catgccaatgc ggctggacag ccacgccaag</p> <p>gccctggagc gcgccaagaa ggcgggtgacc ttcctggtgg tggcaatcct ggcgggtg</p> <p>ctcctctgct ggagcccta ccacctgagc accgtggtgg cgctcaccac cgacctcccg</p> <p>cagacgcgc tgggtcatgc tatctctac ttcatacca gcctgacgta cgccaaacgc</p> <p>tgcctcaacc ccttctcta cgccttctg gacgccagct tccgcaggaa cctccgccag</p> <p>ctgataactt gccgcgcgcg agcctga</p> <p>MDNASFSEP PANASGDDPA LSCSNASTLA PLPAPLAVAV PVVYAVICAV GLAGNSAVLY P</p> <p>VLLRAPRMKT VTNLFILNLA IADELFTLVL PINIADFLLR QWPFEGELMCK LIVAIQXNT</p> <p>FSSLYFLTM SADRYLVWLA TAESRRVAGR TYSAARAVSL AVWGIVTLW LPFAVEARLD</p> <p>DEQRRQCVL VFPQPEAFW RASRLYTLVL GFAIPVSTIC VLYTLLCRL HAMRLDSHAK</p> <p>ALERAKKRV FLVVAAILAVC LLCWTPYHLS TWALTTDLP QTPLVIAISY FITSLTYANS</p> <p>CLNPFLYAF LITCRAAA</p>	Homo sapiens
278	3868	G Protein- Coupled Receptor GPR8	NM_005286	<p>atgcaggccg ctgggcacc agagccctt gacagcagg gctccttct cctccaccg A</p> <p>atgggtgcca acgtctctca ggacaatggc actggccaca atgccacctt ctccgagcca</p> <p>ctgccgttc tctatgtgt cctgccgcg cctgtactcg ggtactgtgc tgtggggtg</p> <p>actggcaaca cggccgtcat cctgtaatc ctaaggcgcc caagatgaa gacggtgacc</p> <p>aacgtgttca tctgaacct ggcgtgcgc caggggtct tcaagctggt actgccgtc</p> <p>aacatcgcg agcactgct gcagtactgg ccttcgggg agctgctctg caagctggtg</p> <p>ctggccgtcg accactaaa catcttctcc agcatctact tctagccgt gatgagcgtg</p> <p>gaccgatacc tgggtgtgct gccaccgtg aggtcccgcc acatgccctg gcgcacctac</p> <p>cggggggcga aggtcgccag cctgtgtgtc tggctggcg tcaaggtcct gttctgccc</p> <p>ttcttctct tgcgtggcgt ctacagcaac gactgacag tcccaagctg tgggctgagc</p> <p>ttcccgctgg ccgagcgggt ctggttcaag gccagccgtg tctacacttt ggtccctggc</p> <p>ttcgtgctgc ccgtgtgcac catctgtgtg cctacacag acctcctgc caggctgcgg</p> <p>gccgtgcggc tccgctctgg agccaaggct ctaggcaagg ccaggcgga ggtgacctc</p> <p>ctggctctcg tgcgtgtggc cgtgtgctc cctgtctga cgcccttcca cctggcctct</p> <p>gtcgtggccc tgaccacgga cctgccccag accccactgg tcatcagtat gtcctacgtc</p> <p>atcaccagcc tcaagctacg caactcgtc ctgaacctt tctctacgc cttctagat</p> <p>gacaacttc ggaagaactt ccgcagcata ttgcggtgct ga</p> <p>MQAAGHPEPL DSRGSFSLPT MGANVSQDNG TGHNATFSEP LPFLYVLLPA VYSGICAVGL P</p> <p>TGNTAVILVI LRAPKMTVT NVFILNLAVA DGLFTLVLPV NIAEHLQYW PFCELLCKLV</p> <p>LAVDHYNIFS SIYFLAVMSV DRYLVVLATV RSRHMPWRTY RGAKVASLCV WLGVTVLVLP</p> <p>FFSFAGVYSN ELQVPSCGLS FPWPERVWFK ASRVYTLVLG FVLPVCTICV LYTDLLRRLR</p> <p>AVRLRSGAKA LGKARRKVTV LVLVLAVCL LCWTPFHLAS VVALTTDLPQ TPLVISMSYV</p> <p>ITSLTYANSC LNPFLYAF LITCRAAA</p>	Homo sapiens
279	3868	G Protein- Coupled Receptor GPR8	NP_005277.1	<p>ttctccagcc tctacttctt caccgtcatg agcgcgacc gctacctggt ggtgtggcc</p> <p>actgcggagt cgcgcgggt ggcggccgc acctacagc ccgcgcgcg ggtgacctg</p> <p>gccgtgtgg ggatcgtcac actcgtcgtg ctgccctcg cagtcttcgc ccggtagac</p> <p>gacgagcagg gccggcgcca gtgcgtgcta gtctttccgc agcccgaggc cttctggtg</p> <p>cgcgagacc gcctctacac gctcgtgctg ggtctcgcca tccccgtgc caccatctgt</p> <p>gtcctctata ccacctgct gtccgggctg catgccaatgc ggctggacag ccacgccaag</p> <p>gccctggagc gcgccaagaa ggcgggtgacc ttcctggtgg tggcaatcct ggcgggtg</p> <p>ctcctctgct ggagcccta ccacctgagc accgtggtgg cgctcaccac cgacctcccg</p> <p>cagacgcgc tgggtcatgc tatctctac ttcatacca gcctgacgta cgccaaacgc</p> <p>tgcctcaacc ccttctcta cgccttctg gacgccagct tccgcaggaa cctccgccag</p> <p>ctgataactt gccgcgcgcg agcctga</p> <p>MDNASFSEP PANASGDDPA LSCSNASTLA PLPAPLAVAV PVVYAVICAV GLAGNSAVLY P</p> <p>VLLRAPRMKT VTNLFILNLA IADELFTLVL PINIADFLLR QWPFEGELMCK LIVAIQXNT</p> <p>FSSLYFLTM SADRYLVWLA TAESRRVAGR TYSAARAVSL AVWGIVTLW LPFAVEARLD</p> <p>DEQRRQCVL VFPQPEAFW RASRLYTLVL GFAIPVSTIC VLYTLLCRL HAMRLDSHAK</p> <p>ALERAKKRV FLVVAAILAVC LLCWTPYHLS TWALTTDLP QTPLVIAISY FITSLTYANS</p> <p>CLNPFLYAF LITCRAAA</p>	Homo sapiens

280	3869	G Protein- Coupled Receptor HM74	NM_006018	cgccactttg ctggagcatt cactaggcga ggcgctccat cggactcact agccgcactc A	Homo sapiens
				atgaatcggc accatctgca ggatcacttt ctggaataag acaagaagaa ctgctgtgtg	
				ttccgagatg acttcattgc caaggtgttg ccgcccgtgt tggggctgga gtttatcttt	
				gggcttctgg gcaatggcct tgccctgtgg attttctgt tccacctcaa gtccctggaaa	
				tccagccgga ttttctgtt caacctggca gtagctgact ttctactgat catctgcctg	
				ccgttcgtga tggactacta tggcggcgt tcagactgga actttgggga catcccttgc	
				cggtcgtgac tcttcattgt tgccatgaac cgccaggga gcatcattt cctcagcgtg	
				gtggcgttag acaggtattt ccgggtggtc catcccacc acgcccagaa caagatctcc	
				aattggacag cagccatcat ctcttgctt ctgtgggga tcaatgtgtg cctaacagtc	
				caactcctga agaagaagt gctgattccg atgtgcccgt caaatgtgtg catcagcttc	
				agcatctgcc atacttccg gtggcacgaa gctatgttcc tcttgagtt cctcctgccc	
				ctgggcatca tctgttctg ctacagcaga attatctgga gctgcggca gagacaaatg	
				gaccggcatg ccaagatcaa gagagccatc accttcata tgggtgtggc catcgtcttt	
				gtcatctgct tcttcccag cgtggttgtg cggatccgca tcttctggct cctgcacact	
				tcgggcacgc agaattgtga agtgaccgc tcggtggacc tggcgttctt tatcactctc	
				agcttcacct acatgaacag catgctggac ccgctgggt actacttctc cagcccatcc	
				tttcccaact tcttctccac ttgatcaac cgctgcctcc agaggaagat gacaggtgag	
				ccagataata accgcagcac ggcgtcag ctacacaggg accccaacaa aaccagaggc	
				gctccagagg cgttaatggc caactccgtt gagccatgga gccctctta tctgggccc	
				acctcaata accattccaa gaaggacat gtcaccaag aaccagcatc tctggagaaa	
				cagttgggct gttgcatcga gtaatgtcac tggactcggc ctaaggttcc ctggaacttc	
				cagattcaga gaattgatt tagggaaact gtggcagatg agtgggagac tgggtgcaag	
				gtgtgaccac aggaatcctg gaggaacaga gactaaagct tctaggcatc tgaacttgc	
				ttcatctctg acgctcgcag gactgaagat gggcaaatg taggcgttcc tgctgagcag	
				agttggagcc agagatctac ttgtgactt ttggccttct tccacatct gcctcagact	
				gggggggct cagctcctcg ggtgatatct agcctcttg tgagctctag cagggataag	
				gagagctgag attgaggga attgtgtgc tctggagga agccaggga tcattaaaa	
				agccagttag tcacctggct tccgtggacc aattcatctt tcagacaagc tttagagaaa	
				tggactcagg gaagagactc acatgctttg gtagtatct gtgttccgg tgggtgtaat	
				aggggattag cccagaagg gactgagcta aacagtgtta ttatgggaaa ggaatggca	
				ttgctgcttt caaccagca ctaatgcaat ccattcctct cttgtttata gtaatctaa	
				ggttgagcag ttaaacaggc ttcaggatag aaagctgttt ccacactgtt tegttttacc	
				attaaaaagg aaacgtgcct ctgcccacg ggtagagggg gtgcacgttc ctctgggtc	
				cttcgcttgt gttctgtac ttacaaaaa tctaccactt caataaattt tgataggaga	
				caaaaaaaaa a	
281	3869	G Protein- Coupled Receptor HM74	NP_006009.1	MNRHLLQDHF LEIDKKNCCV FRDDFIKVL PPVIGLEFIF GLLGNGLALW IFCFHLKSWK P	Homo sapiens
				SSRIFFENLA VADELLIICL PFVMDYYVRR SDWNFGDIPC RLVLMEFAMN RQSIIFLTV	
				VAVDRYFRVV HPHHALNKIS NWTAAIISCL LWGITVGLTV HLLKKLLIQ NGPANVCISF	
				SICHTFRWHE AMELIEFLLP LGIILFCSAR IIWSLRQROM DRHAKIKRAI TFIMVVAIVE	
				VICFLPSVVV RIRIFWLLHT SGTONCEVYR SVDLAFFITL SFTYMNMLD PWYFYSSPS	
				FPNFFSTLIN RCLQRMTGE PDNNRSTSV E LTGDPNKTGR APEALMANSG EPWSPSYLGP	

282	3870	G Protein- Coupled Receptor OGR1	NM_003485	TSNNHKKGH CHQEPASLEK QLGCCIE	atggggaaca tcaactgcaga caactcctcg atgagctgta ccacgacca taccatccac A cagacgctgg ccccggtggt ctatgttacc gtgctggtgg tgggtctccc ggccaactgc ctgtccctct acttcggcta cctgcagatc aaggcccgga acgagctggg cgtgtacctg tgcaacctga cgggtggcga cctcttctac atctgtctgc tgccttctg gctgcagtac gtgctgcagc acgacaactg gtctcaaggc gacctgtcct gccaggtgtg cggcctcctc ctgtacgaga acatctacat cagcgtgggc ttctctgtct gcatctccgt ggaccgtac ctggctgtgg cccatccctt ccgcttccac cagttccgga cctgaaggc ggccgtcggc gtcagcgtgg tcatctgggc caaggagctg ctgaccagca tctacttctt gatgcacgag gaggtcatcg aggacgagaa ccagaccgc gtgtgctttg agcactacc catccaggca tggcagcgcg ccatcaacta ctaccgcttc ctggtgggt tctcttccc catctgctg ctgctggcgt cctaccaggg catcctgcgc gccgtgcgc ggagccacgg caccagaag agccgcaagg accagatcca gggctggtg ctcagcaccg tggatcatctt cctggcctgc ttctgacctt accacgtgtt gctgctggtg cgcagcgtct gggaggccag ctgcgacttc gccaaggcg ttttcaagc ctaccacttc tccctcctgc tcaccagctt caactgcgtc gccgaccccg tgctctactg cttcgtcagc gagaccacc accgggacct gggccgctc cggggggcct gcctggcctt cctcacctgc tccaggaccg gccgggccag ggaggcctac ccgctgggtg ccccgaggc ctccgggaaa agcggggccc aggtgagga gcccgagctg ttgaccaagc tccaccggc cttccagacc cctaactgc cagggtcggg cgggttcccc acgggcaggt tggcctag	Homo sapiens
283	3870	G Protein- Coupled Receptor OGR1	NP_003476.1	MGNITADNSS MSCTIDHTIH QTLAPVYVT VLVGFPANC LSLYFGYLQI KARNELGVYL P CNLTVDLFY ICSLPFWLQY VLQHDNWSHG DLSCQVCGIL LYENIYISVG FLCISVDRI LAVAHPRFH QFRTLKAAGV VSVIWAKEI LSTIYFLMHE EVIEDENQHR VCFEHIPIQA WQRAINYYRF LVGLFPICL LLASYQILR AVRSHGTQK SRKDIQRLV LSTVWIFLAC FLPYHVLLV RSVWEASCDF AKGVFNAYHF SLLTSENCV ADPLYCFVS ETTHRDLARL RGACLAFLTC SRTGRAREAY PLGAPEASGK SGAQGEPEL LTKLHPAFQT PNSPGSGGFP TGRLA	Homo sapiens	
284	3921	Prostacyclin Receptor	NM_000960	agcaagtgaaggcacagc caggggacag gagagcctgg gcaagactgg agagccaga A cctgggatgg cggattcgtg caggaacctc acctactgc ggggctcggg ggggccggcc accagcacc tgatgttctg ggcgggtgtg gtgggcaacg ggtggccct gggcctcctg agcgacggc gaccggcgcg cccctcgcc ttccgggtgc tggtaaccg actggcgcc accgacctgc tgggcaccag cttcctgagc cgggctgtg tctgtggcta tgcgcgcaac agctccctgc tgggctcggc ccgaggcgcc cccgctctg ccatgacctt cgccttcgcc atgacctct tgggctggc gtccatgctc cctctacgag gggcccgctg cggccgctgc ctggcgctga gccacccta cctctacgag cagctggagc gggcccgctg cggccgctg gcgctgccag ccatctacgc cttctgcgtc cttctctgag cgtgccccct gctgggctg ggccaacacc agcagtactg ccccggcagc tgggtcttcc tccgcatgag ctggggccag ccggggcggc ccgccttctc gctggcctac gccggcctgg tggccctgct ggtggctgcc atcttctct gcaacggctc ggtcacctc agcctctgcc gcatgtacc ccagcagaag cgccaccagg gctctctggg tccacggcg cgcaccggag aggacgaggt ggaccacctg	Homo sapiens	

285	3921	Prostacyclin NP_000951.1 Receptor	atcctgtcgg cctcatgac agtggtcatg gccgtgtgct cccgtcctct cactgacgcg tgcttcaccc aggtgtgcg cctgacagc agcagtgaga tggggaccc ccttgccctc cgcttctacg cctcaaccc cactcctggac ccttggtctt tcatcctttt ccgcaaggct gtcttcacgc gactcaagct ctgggtctgc tgcctgtgct ccggtcctgc ccacggagac tcgcagacac ccttttccca gctgcctcc gggagagagg acccaaggcc cccctctgct cctgtgggaa agggggggag ctgctgctt ttgtcggtt gggcgaggg gcaggtggag cccttgctc ccacacagca gtccagcggc agcgcctggg gaactcgtc caagcagaa gccagcgtc cctgctcct ctgctgacat ttcaagctga cctgtgac tctgccctgt cttcgggga caggagccag aaatcagg acatggctga tggctgcgga tctggaacc ttggcccca aactctggg ccgacagct gctgttctc ctgcggaagg gcagtcgctg ctggctctgg gaagagagtg agggacagag gaaacgttta tctggagtgc cagaaagaat ggttctctca aaataaccag tggcctggc gacctgctt ggcctggat tccccatcca tctcattgtc taaatattta gaaggcggag aagttccag aggttctgt acagtcagg ctgctctggt ctgggtgctg gctccaatct gcgtccactt agggggccca actgcccacc ccaagtcccc aggggatggc cctccccct taccagacca ctccaagagc cagccccctt tctgtccac aaaaaccaca gttattggaa aagctccctg ccttcccttg ccgctggctc cccaccaggc ttgggagccc tggcatccca agggggaac gggaggaagg ggaggtgct gcattgtggg tgatgacgta ggacatgtc ttggtacaaa aaggccctga gacattccac ct	Homo sapiens
286	3923	Prostaglandin D2 Receptor	llgtsfslpa vfvayarnss llglarggpa lcdafafamt ffglasmlil famavercla lshpylyaqd dgprcarlal paiyafcvtl calplllglq hqycpgswc flrmrwaqpg gaafslayag lvalivaaif lcngsvtlsl crmyrqokrh qgslgprprt gevedhlil laimtwmav csplrtircf tqavapdss emgdlafre yaenpildpw vfifrkavf qrlklwvcll clgpahtgdsq tplsolasgr rdprapsapv gkegscvpls awgegqvepl pptqssgsa vgtsskaeas vacslc gctgtgcaac ctggcgccca tgcgcaacct ctatgcgatg caccggcggc tgcagcgga cccgctcc tgcaccagg actgtgccga gacgcgcgcg gacgggaggg aagcgtcccc tcagccctg gaggagctgg atcactcct gctgctggcg ctgatgaccg tgctcttcac tatgtttct ctgcccgtaa ttatcgcg ttactatgga gatttaagg atgtcaagga gaaaaacagg acctctgaag aagcagaaga cctccgagcc ttgcgatttc tatctgtgat ttcaattgtg gaccttgga tttttatcat tttcagatct ccagtatttc ggatattttt tcacaagatt ttcattagac ctcttaggta caggagcccg tgcagcaatt ccactaacat ggaatccagt ctgtgacagt gtttttcaat ctgtggtaag ctgaggaata tgtcacattt tcagtcaaaag aacca	Homo sapiens
287	3923	Prostaglandin D2 Receptor	mkspfyrcqn ttsvekgnsa vmgvlfstg llgnllalgl larsglwcs rrlrplpsv fymivcgltv tdlgkclls pvlaayaqn rslrvlapal dnlscqafae fmsffglstt lqlamalec wslghpffr rrlhtrlga lvapvvsafs lafcalfpmg fgkfvqycpg twcfiqwhe egslsvlgs vlyssimall vlatvclnlg amrnlyamhr rlqrhprst rdcaepradg reaspoplee ldhlallalm tvlftmcslp viyrayygae kvkknrt eeaedlrar flsvvisivdp wififrspv frifhkfif rplrysrscs nstnmessl	Homo sapiens

288	3924	Prostaglandin E Receptor EP1	NM_000955	<p> gggggaggca gggctgagcg gccgtgatg ggcagccccc atcccaggca gtgccggcac ccctggcgcc tgacatgagc ccttgccggc cctcaacct gagcctggcg ggcgaggcga ccacatgcgc ggcgccttgg gtcccaaca cgtcgccggt gccgcgctcg ggcgcttcgc ccgcgtgccc catcttctcc atgacgtgg ggcgctgtc caacctgtg gcgctggcgc tgctggcgca ggcgcggggc cgcctggac cgcgcgctc ggcacaccac ttcctgctgt tcgtggccag cctgctggcc accgacctg cgggcccagt gacccgggc gcgctggtc tgctgtgta cactgcgggg cgcgtcccg cgcgcccggc ctgccacttc ctggcgggct gcatggctct cttcgccctg tgcccgtgc tgcctggctg tggcatggcc gtggagcgt gcgtgggctg cagcgggcg cgtctccag cgcgcgggt ctcggctgcc cgcgcgcgc tgccgctggc cgcgtggcc gcgtggcct tggcgtggc gctgctgcc ctggcgcg tgcccgcta tgagctgag taccgggca cgtggtgct catcgccct ggccccgg ggcgctggc ccaggcactg cttgctggc tcttcggcag cctcgccctg gtcgcgtcc tcgccgcgt ggtgtgaac acgtcagc gccctggcct gcctcgcc cgtggcgac gccgctccc accgctccc ccgctcag gcccgacag ccggcgctgc tggggggcgc acggaccccc ctcggcctcc gctcgtccg cctcgctcat cgttcggcc tccacctct ttggcgctc tcggagcagc ggctcgccac gcagagctcg cgcacacgac gtggagatgg tgcccgact tgcgtgctc atggtggtg cgtgcatcg ctggagccca atgctggtg tggtggcgt gccgtcgcc aaccagatcc tggaccttg ggtgtacat ctactgcgc ccgtgctct gcgcaactg cttgcctct tgcctccgag ggcggagcc agggcgcc agccgggct ggcctaaca ccgagcctt ggcgagccag ctcgctgcg agctcccg acagcgccct cagcacttc taagcacaac cagagggccc acgactaagc cagccccacc tgccgctggc ccagtgccg ggcgcagagc cttggggaat aaaaagccat tctgcg </p>	Homo sapiens
289	3924	Prostaglandin E Receptor EP1	NP_000946.1	<p> MSPCGPLNLS LAGEATTCAA PWPNTSAVP PSGASPALPI FSMTPGAVSN LLALALLAQ P AGRLRRRSA TTFLLFVASL LATDLAGHVI PGALVRLTYT AGRAPAGGAC HFLGGCMVFF GLCPILLGCG MAVERCVGVT RPLHAARVS VARARLALAA VAAVALAVAL LPLARVGRYE LQYPTWCFI GLGPPGGWRQ ALLAGLFASL GLVALLAALV CNTLSGLALH RARWRRSR PPRSGPDSR RRGAGHGRS ASASSASSIA SASTFFGSR SSGSARRARA HDVEMVGLV GIMVSCICW SPMLVLVALA VGGWSSTSLQ RPLFLAVRLA SWNQILDWV YILLRQAVLR QLRLPLPPRA GAKGGPAGLG LTPSAWEASS LRSSRHSGLS HF </p>	Homo sapiens
290	3925	Prostaglandin E Receptor EP2	NM_000956	<p> gggcgcgct cgcgcgctg ggtcgggaa ggggctctg gattcggtc cctcccttt A ttcctctgag tctcggaacg ctcagctct cagacctct tctcccagg taaaggccgg gagaggagg cgcctctct ttcaggcac ccacacatgg gcaatgcctc caatgactcc cagctctgag actcgagac gcagagtg cttccccag gcgaagccc agccatcagc tcctcatgt tctcgcccg ggtgctggg aacctcatg cactggcgt gctggcgcg cgtggcggg gggacgtgg gtgcagcgc gcccgagga gctcccttc cttgttccac gtctggtga ccgagctgt gttaccgac cgtctcgga cctgcctcat cagccagtg gtactggctt cgtacgcgc gaaccagac cgtggtggc tggcgccga gagccgcgc tgccactact tcgcttccg catgacctt ttcagcctg ccacgatgt catgtcttc gccatggccc tgagcgcta cctctgac cctcgatc gggacccct acttaccac gcgcgcgc tcggcctccg gggcgctggc cgtgctgct gtcactatg cagtctccct gctctctgc </p>	Homo sapiens

291	3925	Prostaglandi NP_000947.1 n E Receptor EP2	<p>tgctgccc tgctggacta tgggcagtac gtccagtact gccccgggac ctgggtgcttc atccggcacg ggcgaccgcg ttacctgcag ctgtacgcca ccctgctgct gcttctcatt gtctcggtgc tcgcctgcaa cttcagtgct atttcaacc tcaccgcat gcaccgccga agcggagaa gccgctgcgg acctccctg ggcagtggcc gggcgggccc cggggccgcg aggagagggg aaaggggtgc catggcgag gagcggacc acctcattct cctggctatc atgaccatca ccttcgcgt ctgctcctg ccttcacga ttttgcata tatgaatgaa acctttccc gaaaggaaa atgggacctc caagctctta ggtttttatc aattaattca ataattgacc ctgggtctt tgccatcctt aggcctcctg ttctgagact aatgcgttca gtcctctgtt gtcggatttc attagaaca caagatgcaa cacaacctc ctgttctaca cagtcagatg ccagtaaca ggctgacctt tgagtcagt agttaaaag ttcttagtta tatagcatct ggaagatcat ttgaaaattg ttccctggag aaatgaaaac agtgtgtaaa caaatgaag ctgccctaataaaaaggagt atacaacat ttaagctgtg gtcaaggcta cagatgtgct gacaaggcac ttcatgtaaa gtgtcagaag gagctacaaa acctaccctc aatgagcatg gtacttgcc ttggaggaa caatcggtg cattgaagat ccagctgcct attgatttaa gcttctctg tgaatgacaa agtatgtggt ttgttaattt gtttgaacc ccaaacagt actgtactt ctattttaat ctgctacta cgtttataca catatagtgt acagccagac cagattaaac ttcatatgta atcttagga agtcaatatg tggaaagcaac caagcctgct gtcttgat cacttagcga acctttatt tgaacaaatga agttgaaaat cataggcacc ttttactgt atgtttgtgt atgtgggagt actctcatca ctacagtatt actcttaca gagtggact agtgggttaa catcagtttt gtttactcat cctccaggaa ctgcaggta agttgtcagg ttattttatt tataatgtcc atagtcta atgtgatcaag aagactttag gaatgggtct ctcaacaaga aataatagaa atgtctcaag gcagttaatt ctcataata ctcttattat cctatttctg ggggaggatg tacgtggcca tgtatgaagc caaatattag gcttaaaaac tgaaaaatct ggttcattct tcagatatatc tggaacctt ttaaagtga tattggggcc atgagtaaaa tagattttat aagatgactg tgtgtacca aaattcatct gtctatattt tattagggg aacatgggtt gactcatctt atatgggaaa ccatgtagca gtgagtcata tcttaataa ttctaaaatg ttggcatgt aaatgtaaac tcagcatcaa aatatttcag tgaatttgca ctgtttaatc atagtactg tgtaaaactca tctgaaatgt taaaaaata aactataaaa Ca</p> <p>MGNASNDQS EDCETQWLP PGESPAISSV MFSAGVLGNL IALALLARW RGDVGCsAGR P RSSLSEHVL VTELVTDLL GTCLISPVVL ASYARNQTLV ALAPESRACT YFAFAMTFFS LATMLMLFAM ALERYLSIGH PYFYQRRVSA SGGLAVLPVI YAVSLLFCSL PLDDYGQYVQ YCPGTWC FIR HGRTAYLQLY ATLLLLLVIS VLACNFSVIL NLRMHRRSR RSRGSPSLGS GRGGPGARR GERVSMAEET DHLILLAIMT ITFVCSLPF TIFAYMNETS SRKEKWDLQA LRFLSINSII DPWFALIRP PVLRLMRSVL CCRISLRTQD ATQTSCTQS DASKQADL</p> <p>atgagaaaaa gaagactcag agagcaagag gaattttggg gaaattaa A Homo sapiens</p>	Homo sapiens
292	3926	Prostaglandi L32662 n E2 Receptor EP3	<p>accagaggtt tccagagag gaaggcgtg ctccctccc ggccagttag ccttgcgcc A gccgcccgcg cggctccagc agcggagtag ggcgcggtt gcgccccga ccatggggg cagcccagcc ccagccgagg taaacgcga cctccgcgc gcgccgcgc gcgtctgccc</p>	Homo sapiens
293	3926	Prostaglandi NM_000957 n E2 Receptor EP3		Homo sapiens

294	3926	Prostaglandin E2 Receptor EP3	NP_000948.1	ac	cctcccgctg cggctctctg gacgccatcc cctcctcacc tcgaagccaa catgaaggag acccggggtc acggaggga tgcccccttc tgcaccgcc tcaaccactc ctacacaggc atgtggggcg ccgagcggtc cgcgaggcg cggggcaacc tcacgcgcc tcagggtctc ggcgaggatt gcgatcggt gtcgctggcc ttcccgata ccatgctgct cactggtttc gtgggaaag cactggccat gctgctcgtg tgcgcagct accggcgccg ggagagcaag cgaaagaagt ccttctcgt gtgcatcgcc tggctgggc tcaccgacct ggtcggggcag cttctacca ccccggtcgt catcgtcgtg tacctgtcca agcagcgttg ggagcacatc gaccgctgg ggcgctctg cacttttttc ggcctgacca tgactgtttt cgggctctcc tcgttgttca tcgccagcg catggccgtc gagcgggcg tggccatcag ggcggccgac tggtatgga gccacatgaa gacgctgccc acccgcgctg tgctgctcg cgtgtggctg gccgtgctcg ccttcgccc gctgcccgtg ctggcgctgg gccagtacac cgtccagtg cccgggagct ggtgcttcat cagcacggg cgagggggca acgggactag ctcttcgcat aactgggga accttttctt cgcctctgcc tttgccttc tggggtctt ggcgtgaca gtcacctttt cctgcaacct ggcaccatt aaggccctgg tgtcccgtg cggggccaa gccacggcat ctacgtccag tgccagtg ggcgcataca gcaccgagac ggcattcag cttatggga tcatgtcgt gctgtcggtc tgctggtctc cgctcctgat aatgatgtg aaaatgatct tcaatcagac atcagttgag cactgcaaga cacacacgga gaagcagaaa gaatgcaact tcttcttaat agctgttcgc ctgcgaaagt tttgccagat gaaaaaga tggttttacc tgctgttaag aaagatcctt ctccgaaagt tttgccagat gaaaaaga agactcagag agcaagagat gggcctgat ggaagtggt tttgtcatgc atggaggcag gtccccagga ctgtgtgcag ttctcatgat agagaacct cagtggtcca gctaagctga tgactgaag ataatctgc ctaacctgg gatgaagtat cgtgaacta ttttgacagc agatgaggaa ttttgggaa attaaaacct gcctttctgc caggatcaca tcaatgaa ctccatgact ctctttttgt aaagaaaaa aaaaacacag aaacacccac ctccaaact attctctttt acttcttccc ccaagccac ccccaaatat aactgttatc cagaagctgt tatgtcctgt ttccatacat gtttttgtac ttttactata tctacataca tcaatataac ttatgtccta ttgttttgtg aatttatatt tgcgtataca ttatcatatg taaaatttgc atttttttat tgaataattat gtttcttgag atttatccac attgaaacat ggagctctaa atcgttaatt ttaaccgcta tagagtattc cataatttga ataaagcata atttgttgt	Homo sapiens
295	3927	Prostaglandin E Receptor EP4	NM_000958	ls	TGFEVGNALAM LLVRSYRRR ESKRKSFLL CIGWLALTDL VGQLLTPV IVVYLSKQRW EHIDPSGRLC TFFGLTMTVF GLSLFIASA MAVERALAIR APHWYASHMK TRATRAVLIG VWLAVLAFAL LPVLGVGQYT VQWPGTWCFI STGRGNGTS SSHNWGNLFF ASAFALIGLL ALTVTFSCNL ATIKALVSR RAKATASQSS AQWGRITTEI AIQLMGIMCV LSVCSPLLI MMLKMIFFQI SVEHCKTHTE KQKECNFFLI AVRLASLNQI LDPWVYLLR KILLRKFQCM RKRLRREQEM GPDGRFCFHA WRQVPRTWCS SHDREPCSVQ cggcacagcc tcacacctga acgctgtcct cccgcagac agaccggcg gactgcaaa A gctgggactc gtctttgaag gaaaaaaat agcagagtaag aaatccagca ccattcttca ctgacccatc ccgctgcacc tctgtttcc caagttttg aaagctggca actctgacct cgggtgtcca aaatcgacag ccactgagac cggctttgag aagccgaaga ttgtggcagtt	Homo sapiens

296	3927	Prostaglandin E Receptor EP4	NP_000949.1	MSTPGVNSSA SLSPDRLNSP VTIPAVMEIF GVVGNLVAIV VLCKSRKEQK ETTFTYTLVCG P LAVTDLLGTL LVSPVTIATY MKQWPFGQP LCEYSTFILL FFSLSGLSII CAMSVERLYA INHAYFYSHY VDKRLAGLTL FAVYASNVLF CALPNMGLGS SRLQYPTDTC FIDWTNVT HAAYSVMYAG FSSFLILATV LCNVLVCGAL LRMHRQFMRR VILIIATSLV VLICSIPLV RVFVNQLYQP HPAASPALPR LSDFERRRSF RRIAGAEIQM VILLIATSLV LKKTVL SKA IEKIKLFCR IGSSRRERSG SLEREVSKNP DLQAIRIASV NPILDPIWIY LLRKTVL SKA IEKIKLFCR IGSSRRERSG QHCSDSQRTS SAMSGHSRSF ISRELKEISS TSQTLLPDL LKPDISENGLG GRNLLPGVPG MGLAQEDTTS LRTLRISETS DSSQGDSES VLLVDEAGGS GRAGPAPKGS SLQVTFPSET LNLSEKCI	Homo sapiens
297	3928	Prostaglandin F2-alpha Receptor	NM_000959	gacccctggg ggctcgtgag gctgccaccg ctgctgccgc tacagaccca gccttgcact ccaaggctgc gcaccgccag ccactatcat gtccactccc ggggtcaatt cgtccgcctc cttgagcccc gaccggctga acagccaggt gaccatccc gcggtgatgt tcatcttcgg ggtggtgggc aacctggtg ccactgtggt gctgtgcaag tgcgcaagg agcagaagga gacgacctc tacagctgg tatgtgggt ggctgtcacc gactgttgg gactttgtt ggtgagcccc gtgacctcg ccactacat gaaggccaa tggccccggg gccagccgct gtcgagtagc agcaccttca ttctgtctt accatgacct caacctgcc tatttctaca gccactacgt cgccatgagt gtgagcgct acctggccat caacctgcc tatttctaca gccactacgt ggacaagcga ttggcgggc tcacgtctt tcagtgctc gcggtgcag taccagaca cctggtgctt cgctgccc aacatgggtc tcgtagctc tgacggcgca cgccgctac tctacatgt acgcggtt catgactgg accaccaag tgacggcgca cgccgctac tctacatgt acgcggtt cagtccttc ctcattctcg ccactgctc ctgcaacgtg ctgtgtgcg gcgcgtgct ccgatgcac cgccagttca tgcgcgcac ctgcctggc accgagcagc accagcggc cgcgccgc tcggttgcct ccgggggcca cccgctgc cccagcct tcccgacct tgcgcgcct cagcgactt cgcgccgc ggagcttcg cgcctgcg cgcctgcg ggcgcgaga tccagatggt catcttactc attgccact cctgtgtggt gctcatctgc tccatcccgc tctgtgtgcg agtattctc aaccagttat atcagccaag ttggagcga gaagtcagta aaaaaccaga tttgaggcc atccgaattg cttctgtgaa cccatccta gacccctgga tatatactc cctgagaaag acagtgtca gtaagcaat agagaagatc aaatgcctc tctgcccac tgccgggtcc cgcaggagc gctcggaca gactgtca gacagtcaa ggacatctc tgccatgtca ggcactctc gctcctcat ctcggggag ctgaaggaga tcagcagtagc atctcagacc ctcctgccag acctcact gccagacctc agtgaagtgc gccttgagg caggaattg cttccagggt tgcctggcat ggcctggcc caggaagaca ccactcact gaggacttg cgaatatac agacctcaga cttctcacag ggtcaggact cagagagtgt cttactggtg gatgagctg gtggagcgg cagggtggt cctgccccta aggggagctc cctgcaagtc acatttcca gtgaacact gaactatca gaaaatgta tataataggc aaggaaagaa atacagtact gttctggac cttataaaa tctgtgcaa tagacacata catgtcacat ttactgtgc tcagaaggc tatcatca	Homo sapiens
297	3928	Prostaglandin F2-alpha Receptor	NM_000959	ggcgcggggc gccatggcac accgagcggc tccgtcttct gctcctcaga gagcccggt A ggcgcgctgg gatgacaaga tgtctggact gcaatcctgc acagtttga gagggagatg acttgagtgg ttggctttta tctccacaac aatgtccatg acaatttcca aacagctagt	Homo sapiens

gtctcctgca gctgcgcttc tttaaacac aacctgcccag acggaatacc ggctttccgt
atTTTTtca gtaatcttca tgacagtggg aatcttgcca aacagccttg ccatcgccat
tctcatgaag gcatatcaga gatttagaca gaagtccaag gcatcgtttc tgcttttggc
cagcgccctg gtaatcactg atttctttgg ccatctcacc aatggagcca tagcagtatt
tgtatatgct tctgataaag aatggatccg ctttgacca tcaaatgtcc ttgcaagtat
ttttgggtac tgcattggtt tttctggtct gtgccactt cttctaggca gtgtgatggc
cattgagcgg tgtattggag tcaaaaacc aatatttcat tctacgaaaa ttacatccaa
acatgtgaaa atgatgttaa gtggtgtgtg cttgtttgct gttttcatag ctttgtctgc
catccttgga catcgagact ataaaattca ggcgtcgagg acctggtgtt tctacaacac
agaagacatc aaagactggg aagatagatt ttatcttcta cttttttctt tctggggct
cttagccctt ggtgtttcat tgttgtgcaa tgcatacaca ggaattacac tttaagagt
taaatTTaaa agtcagcagc acagacaagg cagatctcat catttggaat tggtaatcca
gtcctggcg ataatgtgtg tctcctgtat ttgttgagg ccatttcttg ttacaatggc
caacattgga ataaatggaa atcattctct ggaacctgt gaaacaacac ttttgtctct
ccgaatggca acatggaatc aaatcttaga tctttgggta tatattcttc tacgaaaggc
tgtccttaag aatctctata agcttgccag tcaatgctgt ggagtgcagt tcatcagctt
acataatttg gagcttagtt ccattaaaaa ttccttaaa gttgctgcta tttctgagtc
accagttgca gagaaatcag caagcaccta gcttaaatagg acagtaaatc tgtgtggggc
tagaacaataa attaagacat gtttgcaat atttcagtta gttaaatacc tgtagcctaa
ctggaaaatt caggcttcat catgtagttt gaagatacta ttgtcagatt caggttttga
aatttgtcaa ataaacagga taactgtaca ttttcaactt gttttgcca atgggaggta
gacacaataa ataatagcca tgggagtcac actgaaagca attttgagct tatctgtctt
atttatgctt tgagtgaatc atctgttgag gtctaagcc tctacttggc ctatttgcca
gagaacatct taatgcagcc tgcatagtga aatggttatt ttgagatcac cgctctgtag
ctaaccctta taaactaggc tcagtaaaaat aaagcactct tattttttga tctggcctat
tttgccctc atgtgtgagc ctcaattaac ccaggtctgg cagacacacc cagaattcat
gatggtttgt tataacaacc tctgcataat ccaggtctgg cagacaggtt gcctgacctt
gcaatcctat ctagaatggg cccattcttg tcacatttga caaataggac tgcctacatt
tattattatg aaggtcgatt gttgttgga gtgttttttc atgtcataga ttagcaattt
tcaataaatt attttttctc tgaataattt gtgtgtgatt gcacaataaa taatttttag
agaaacaaa gctctttctc agcacattga tgggcaacta gaattacagc agtttcaaac
tctaccatgg ataatagcaa caaacgaa gctacatgcca atgataggtg caaagaatat
tggcaaaaag tgctttacct tgagccatta ttgtgtctag agaacaaga aacagaaatc
aatatataaa ttcaaaagct atctgcagct agtgtgttc tctttacac acatatacac
acagacatca gaaaattctg ttgagagcag gttcattaaa ttgttaagat ggcatattct
aaagcctgtg ctaccagtac taagagggga agactggcaa ttgccaagc acttggggat
tattataaca attaactagg agatcaagag ataataatct ctcccaaat ttccaataa
taattgagac tttttcttgg cttgtttgtg taattcaacc aaaagaattt caatcccat
tcaaatgtc ctaggctctat cagaaattag ggaaggtagt cctgctttat aataggaaaa
tgtatttctg tataagattt ctttgcttcc attaaaaatg ggattcattt aaaaattaat
ctttccctgt taggtgatt tcagattctc taggaatct taggaagtaa ccagaagact

298	3928	Prostaglandin F2-alpha Receptor	NP_000950.1	MSMNSKQLV SPAAALLSNT TCQTENRLSV FFSVIFMTVG ILSNSLAIAI LMKAYQRFHQ P	Homo sapiens
				ttcagatggt ttatttgctt tcagcagaga atttatttca tacagttact taagagtgtt gatgtcttgt gaacagagat ataaaggaacc attctccatc cttccttacc atgctgggta caatgcttct atgaatattt ccatgtattt tgactgggga gaggcattga gaagaaactc tcattcaggg gctccaggat ccttctcctt gaggttctta aataaatggc agaattcttg ctgtattgcc atgatgtcac cctggccatg tgtactgact tgaggagatc ttgcaacatg gccatgtgca aggcctttaag gactgagaga gatgtgtaca tatcttagga gggttatcta tgttatctga gtatatgtt gggtaaccaa atgtgtctta aaatgatgt taaccaaga agtagacatc aaaaattaaa aaaaaaaa aaaa	
299	4051	Proteinase-Activated Receptor 2	NM_005242	KSKASFLLA SGLVITDFG HLINGAIAVF VYASDKEMIR FDQSNVLCSE FGICMVFSGL CPLLGSVMA IERCIGVTKP IFHSTKITSK HVKMLSGVC LFAVFIALLP ILGHRDYKIQ ASRTWCFYNT EDIKDWEDRF YLLFSFLGL LALGVSLLCN AITGITLLRV KFKSQHRQG RSHLEMWIQ LLAIMCVSCI CWSPFLVTMA NINGNHSL ETCETTLFAL RMTWNQILD PWVYILRKA VLKNLYKLAS QCCGVHVISL HIWELSSIKN SLKVAIASES PVAEKSAST cgccccgcc tggggaggcg cgcagcagag gctccgattc ggggcagggt agaggctgac A tttctctcgg tgcgtccagt ggagctctga gtttcgaatc ggtggcgccg gatccccgc gcgccccgcg tcggggcttc caggaggatg cggagcccca gcgcggcggt gctgctgggg gcgcgcaccc tgctagcagc ctctctctcc tgcagtgcca ccatccaagg aaccaataga tcctctaaag gaagaagcct tattggtaag gttgatggca catcccacgt cactggaaaa ggagttacag ttgaacacgt ctttctctg gatgagtttt ctgcatctgt cctcactgga aaactgacca cggctcttct tccaattgtc tacacaattg tgttctgtgt ggttttgcca agtaacggca tggccctgtg ggtcttctt ttcgaacta agaagaagca cctgctgtg attacatgg ccaatctggc cttggctgac ctctctctg tcactctgtt ccccttgaag attgctatc acatacatg caacaactgg atttatggg aagctctttg taatgtgctt attggctttt tctatggcaa catgtactgt tccattctct tcactgacct cctcagtggt cagaggtatt gggctacgt gaaccccatg gggcactcca ggaagaaggc aaacattgcc attggcatct cctggcaat atggctgtg atctgtgtg tcaccatccc ttgtatgtc gtgaagcaga ccattctcat tctgcccctg aacatcacga cctgtcatga tgttttgct gagcagctct tggggggaga catgttcaat tacttctct ctctggccat tgggtcttt ctgttccag ccttccctac agcctctgcc tatgtgtga tgatcagaat gctgcgatct ctgcccag atgaactc agagaagaaa aggaagaggg ccatcaaac cattgtcact gtcctggcca tgtacctgat ctgcttctact cctagtaacc tctgcttgt ggtgcattat tttctgatta agagccaggg ccagagccat gttatgccc tgtacattgt agccctctgc ctctctaccc ttaacagctg catcgacccc tttgtctatt actttgttt acatgatttc agggatcatg caaagaacgc tctcctttgc cgaagtgtcc gactgtaaa agcatgcaa gtatccctca cctcaagaa acactccagg aaatccagct ctactcttc aagttcaacc actgttaaga cctcctattg agttttccag gtcctcagat gggaattgca cagtaggatg tggaaacctgt ttaatgttat gaggacgtgt ctgttatttc ctaatcaaaa aggtctcacc acataccacc g	Homo sapiens
300	4051	Proteinase-Activated Receptor	NP_005233.2	MRSPSAWLL GAAILLAASL SCSGTIQGTN RSSKGRSLIG KVDGTSHTVG KGVTVEVFS P VDEFSASVLT GKLTIVFLPI VYTIVFVGL PSNGMALWVF LFRKKKHPA VIYMANLALA	Homo sapiens

[illegible]

303	4090	G Protein- Coupled Receptor GPR17	NM_005291	KASLLILVIF TICFAPSNI I LIIHHANYYY NNTDGLYFIY LIALCLGSLN SCLDPFLYFL MSKTRNHSTA YLTK	ccgcacacca cgggaggaga tcaactgctg cccgcagac ccctgtccct tcctcccgga A ccagcagcta gaggatgtcc aaacggagtt ggtgggctgg atccagaaag ccccaagag agatgctgaa actctcaggc tctgactcca gccaaagcat gaatggcctt gaagtggctc cccaggctt gataccaac ttctccctgg ccaacggcaga gcaatgtggc caggagacgc cactggagaa catgctgttc gctctcttct accttctgga ttttatactg gctttagttg gcaataccct ggctctgtgg cttttcatcc gagaccacaa gtccgggacc ccggccaacg tgttctctgat gcatctggcc gtggccgact tgtcgtgctg gctggctctg ccaccccgcc tgttctacca cttctctggg aaccactggc catttgggga aatcgcatgc cgtctcaccg gttctctctt ctacctcaac atgtacgcca gcatctactt cctcacctgc atcagcgccg accgtttcct ggccattgtg caccgggtca agtccctcaa gtcocgcagg cccctctacg cacacctggc ctgtgccttc ctgtgggtgg tgggtgctgt ggccatggcc cggctgctgg tgagccaca gaccgtgcag accaaccaca cgggtggtctg cctgcagctg taccgggaga aggctccca ccatgccctg gtgtccctgg cagtggcctt caccttccc ttcatcacca cggtaacctg ctacctgctg atcatccgca gcctgggca gggcctgcgt gtggagaagc gcctcaagac caaggcagtg cgcatactgc ccatagtgct ggccatcttc ctggtctgct tcgtgcccta ccacgtcaac cgctccgtct acgtgctgca ctaccgcagc catggggcct cctggccac ccagcgcac ctggccctgg caaacgcac cactcctgc ctaccagcc tcaacggggc actcgacccc atcatgtatt tcttcgtggc tgagaagttc cgccacgccc tgtgcaactt gctctgtggc aaaaggctca agggcccgcc cccagcttc gaaggga ccaacgagag ctgctgagtg gccagtcag agctgtgagc gggggggccg gtccaggccg agcgcagact gtttaggact cagcagaccc agcaagaggc atctgcccct tcccagcca cctccccagc aagcaacctg aaatctcagc agatgccac catttctta gatcgccatg tctcaaccca taaaaaggaa gaactgacaa aggggatcca tcggccaccc ctctgcaggg gcttgtgatg gctacaatgg ctcttagaca ctcaacgact tcactgtgg caggagaga ggaggccgga agaacaaccc ctgaacaatg gaggccttct ttcccgcta ggtccccc ctccttccc ctacagaatc gctcatcggc gaggtcagc agaaagacc tgaaggcagg ctgcaaatga cccagaagag ggacctggga gtccgtgtgg ggacggggag ggagtctcaa tactcctttg cagcgcaagg tactctgagt cccctctgta gtgcctctgc cagacacaca ctgctctgagt tgaagagaca caggccacac atttcaggct ggttgccagc ggacgtcagc actcacggcc tgcggggact cagcacagct ctggattctg gatctctct gctgtaaccc cacgcacaag cctgcaaccc ccagagctct ttgacaggct cccaggccctc ccagtcctgg acaagcatgt gcagtcacgg gagctcagct caggccaggg ctgggctgtg cacctgcctc ccactgacc agaccactt cctccagaga ggccctctctc cgcctgagct atttccctg ctagtgtgca gatatttccc taacatgtcc tttttgtat ttgtttgtac ggaccataaa tataactgta gctttaagac taataaaaa	Homo sapiens
304	4090	G Protein- Coupled Receptor GPR17	NP_005282.1	MSKRSWAGS RKPPREMLKL SGSDSSQSMN GLEVAPPGLI TNFSLATAEQ CGQETPLENM P LFASFYLLDF ILALVGNTLA LWFIRDHKS GTPANVFLMH LAVADLSCVL VLPTRLVYHF SGNHWFEI ACRLTGFEFY LNMYSIYFL TCISADRFIA IVHPVKSLKL RRLYAHILAC AFLWVVVAVA MAPLLVSPQT VQTNHTVVCL QLYREKASHH ALVSLAVAF FPFITVTICY	Homo sapiens	

305	4254	Rhodopsin	NM_000539	LSAKSEL	LLIIRSLRQG LRVEKRLKTK AVRMIIVLA IFLVCFVPYH VNRVYVLHY RSHGASCATQ RILALANRIT SCLTSLNGAL DPIMYFFVAE KFRHALCNLL CGKRLKGPPP SFEKKTNESS	Homo sapiens
					agagtcaccc agctggagcc ctgagtggct gagctcagcc ctctgcagca ttcttgggtg A ggagcagcca cgggtcagcc acaagggccca cagccatgaa tggcacagaa ggcctaact tctacgtgcc ctctccaat gcgacgggtg tggtagcag ccccttcgag taccacagt actacctggc tgagccatgg cagttctcca tgctggcgc ctacatgtt ctgctgatcg tgctgggctt ccccatcaac ttctcacgc tctacgtcac cgtccagcac aagaagctgc gcacgcctct caactacatc ctgctcaacc tagccgtggc tgacctctc atggtcctag gtggcttcac cagcacctc tacacctctc tgcattgata ctctgtctc ggccacacag gatgaattt ggagggttc ttggccacc ttggcggtga aattgccctg tggctcttgg tggctctggc catcgagcg taccgtgtgg tctgtaagcc catgagcaac ttcgcttcg gggagaacca tgccatcatg ggcttgctt tccactgggt catggcgctg gctgcgccc caccacct cgcgggtgg tccaggtaca tcccggagg cctgcagtc tctgtggaa tcgactacta cagctcaag cggaggtca acaagagtc ttctgtcat tcatgttcg tggctcactt caccatccc atgattatca tcttttctg ctatggcag ctgctctca ccgtcaagga ggctgtgccc cagcagcagg agtcagccac cacacagaag gcagagaagg aggtcacccc catgtctatc atcatggtca tgccttctt gatctgtgg gtgcctacg ccagctggc attctacatc ttaccacc accaggtccaa cctcggtccc atctcatga ccatccagc gttctttgccc aagagcgccc ccactcaaa cctgtctatc tatatcatga tgaacaagca gtcccggaac tgcattgctca caccatctg ctgcggcaag aaccactgg gtgacgatga ggctctgct accgtgtcca agacggagac gagccaggtg gcccggcct aagacctgcc taggactctg tggcggacta taggcgtct ccatcccta cacttcccc cagccacagc catccacca ggagcagcg ctgtgcagaa tgaacgaagt cacataggct ccttaatttt ttttttttt ttaagaaata attaatgagg ctctcactc acctgggaca gcctgagaag ggacatccac caagacctac tgatctggag tcccacgttc ccaaggcca gcgggatgtg tgccctctct cctcccaact catctttcag gaacacgagg attctgtctt tctggaaaaa tgctccagct tagggataag tgtctagcac agaattgggc acacagtagg tgcttaataa atgctggatg gatgcaggaa ggaattggagg aatgaatggg aagggagaac atatctatcc tctcagaccc tgcagcagc agcaactcat acttggctaa tgatatggag cagttgtttt tccctccctg ggctcactt tcttctcta taaaatggaa atccagatc cctggctctg ccgacacgca gctactgaga agacaaaag aggtgtgtgt gtgtctatgt gtgtgtttca gcactttgta aatagcaaga agctgtacag attctagta atgttgtgaa taacatcaat taatgtaact agttaattac tatgattatc acctctgat agtgaacatt ttgagattgg gcattcagat gatgggtttt caccacaact tggggcaggt ttttaaaat tagctaggca tcaaggccag accagggtctg ggggttgggc tgtaggcagg gcagtcaca ggaatgcagg atgcagtcac cagacctgaa aaaacaacac tgggggaggg ggaacgtgaa ggccaagtcc ccaatgaggg tgagattggg cctggggtct caccctagt tgggggcccc aggtcccctg cctcccctc ccaatgtggc ctatggagag acaggccttt ctctcagcct ctggaagcca cctgctcttt tgctctagca cctgggtccc agcatctaga gcattggagcc tctagaagcc atgctcacc gccacattt aattaacagc tgagtccctg atgtcatcct	

306	4254	Rhodopsin	NP_000530.1	<p>tactcgaaga gcttagaagc aaagagtggtg aaattccact ggccctacct tccttgggga</p> <p>tgttcatggg cccagattc cagtttccct tgccagacaa gccatcttc agcagttgct</p> <p>agtcattct ccattctgga gaatctgtc caaaagctg gccacatctc tgaggtgtca</p> <p>gaattaagct gcctcagtaa ctgtccccc ttctccat atagcaagcc agaagctcta</p> <p>gctttaccca gctctgctg gagactaag caaattgggc cattaaaagc tcagctccta</p> <p>tggtggtatt aacggtggtg ggtttgttg cttccacct ctatccacag gatagattga</p> <p>aactgccagc ttccacctga tccctgacct tgggatggct ggattgagca atgagcagag</p> <p>ccaagcagca cagagtcccc tggggctaga ggtggaggag gcagtctctg gaatgggaaa</p> <p>aacccca</p>	Homo sapiens
307	4284	Retinal G Protein-Coupled Receptor RPE	NM_002921	<p>agagacagct gggccactgg cagtgaggga gagtggat ggagagacc agtgcctgc A</p> <p>ccactggctt cggggagctc gagtgctgg ctgtgggat ggtgctactg gtggaagctc</p> <p>ttctcggctc cagctcaat acctgacca tcttctctt ctgcaagacc cgggagctgc</p> <p>ggactccctg ccactactg gtgctgagct tggctcttgc ggacagtgg atcagcctga</p> <p>atgccctcgt tgcagccaca tccagcctc tccgggctg gccctacggc tgggacggct</p> <p>gccaggtca cggcttccag ggcttctga cagcgttgc cagcatctgc agcagtgcag</p> <p>ccatgcctg gggcgcttat caccactact gcaccgtag ccagctggcc tggaaactcag</p> <p>ccgtctctct ggtgctcttc gtgtgctgt cttctgctt ctgggcagct ctgccccctc</p> <p>tggtgtgggg tcactatgac tatgagccac tggggacatg ctgcacctg gactactcca</p> <p>agggggacag aaacttacc agcttctct taccatgtc cttcttcaac ttcgccaatgc</p> <p>ccctcttcat cagatcact tctacagtc tcatggagca gaaactgggg aagagtggcc</p> <p>atctccaggt aaacaccact ctgccagcaa ggacgtgtgt gctcggctgg gggccctatg</p> <p>ccatctctga tctatagca gtcactgcag acgtgacttc catctcccc aaactgcaga</p> <p>tggtgcccg cctcattgccc aaaaatggtg ccacgatcaa tggcatcaac tatgccccgg</p> <p>gcaatgagat ggtctgcagg ggaatctggc agtgcctctc accgcagaag agggagaagg</p> <p>accgaaccaa gtgagcctgc caccctggag tgagccccag gccaggaggc tgttccagg</p> <p>gtcttgccca gcagcctcgg tggccaagcc cagacactca cccaccttc ccagtggccc</p> <p>cgtgatcct ggtcctaggc tggacacagg attcgaagac acaccaggct gcacagaaa</p> <p>agccagatgg acctgagtgt cggtcacagc cccctacact caaggctgag aggcctcagg</p> <p>aaagtcattc ctttttaaaa ataataataa atgtaagggg gtacagtga gttttgttac</p> <p>atggatagat tgcctagtgg tgaagtctgg gcttttagtg taaccatcac cctaataata</p> <p>tacgtgtgac ccattaagt atttctcct cctcaccctc tccaccttg tcaccttct</p> <p>gagtcctcaa tgtctattat tccacactcc atgtccactg gtacacatta tttagctccc</p> <p>acttaacagt gagaacatgt ggtattgac ttcca</p>	Homo sapiens
308	4284	Retinal G Protein-	NP_002912.1	<p>MAETSAALPTG FGELEVLAVG NVLLVEALSG LSLNLTIFS FCKTPELRTP CHLLVLSLAL P</p> <p>ADSGISLNAL VAATSSLLRR WPGSDGCGQA HGFGGFVTAL ASICSSAAIA WGRYHYCTR</p>	Homo sapiens

309	4321	Coupled Receptor RPE	Secretin Receptor	NM_002980	SQLAWN SAVS LVLFWLSSA FWAALPLL GW GHYDYEPLGT CCTLDYSKGD RNFTSFLFTM	Homo sapiens
					SFENFAMPLF ITITSYSLME QKLGKSGHLQ VNTTLPARTL LLGWGPYAIL YLYAVIADVT	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	SISPKLQMPV ALIAKMVPTI NAINYALGNE MVCRIWQCL SPQKREKDRIT K	Homo sapiens
					agcaggccgg ccggagcccg ggaccctgcg cggggcgctg agctcccgag cgggcagagg A	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	gcacgggcag gcggacgtcg gggcgccctc ggggaacgtg cgggcaccat gcgtcccccac	Homo sapiens
					ctgtcgccgc cgctgcagca gctactactg ccggtgctgc tgcctcgcc cgcgcactcg	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	actggagccc ttccccgact atgtgacgtg ctacaagtgc tgtgggaaga gcaagaccag	Homo sapiens
					tgcctgcagg aactctccag agagcagaca ggagacctgg gcacggagca gccagtgcc	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	ggttgtgagg ggttgtggga caacataagc tgcctggcct cttctgtgcc gggccggatg	Homo sapiens
					gtggaggtgg aatgccccgag attcctccgg atgtccacca gcagaaatgg ttccttgctc	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	cgaaactgca cacaggatgg ctggtcagaa accctcccca ggcctaactt ggcctgtggc	Homo sapiens
					gtaaatgtga acgactcttc caacgagaag cggcactcct acctgtgaa gctgaaagtc	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	atgtacaccg tgggctacag ctctccctcg gtcattgtcc tggcgcctt tggcattcctc	Homo sapiens
					tgtgctttcc ggaggctcca ctgcactcgc aactacatcc acatgcacct gtctgtgtcc	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	ttcatccttc gtgcctgtc caacttcac aaggacgccc tgcctcttc ctcagatgat	Homo sapiens
					gtcaactact gcgataccga caggcgggc tgcagactgg tcatggtgct gtccagttac	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	tgcacatgg ccaactactc ctggctgctg tgggaaggcc tctacctca cacactcctc	Homo sapiens
					gccatcctct tcttctctga aagaaagtac ctccagggat ttgtggcatt cggatgggggt	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	tctccagcca tttttgttgc tttgtgggtt attgccagac attttctgga agatgttggg	Homo sapiens
					tgttgggaca tcaatgccaa cgcattccatc tggtagatca ttcgtgtgctc tgtgattcctc	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	tccatcctga ttaatttcac ccttttcata aacattctaa gaatcctgat gagaaaactt	Homo sapiens
					agaacccaag aaacaagagg aaatgaagtc agccattata agcgcctggc caggtccact	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	ctcctgctga tccccctctt tggcatccac tacatgctct tcgcttctc cccagaggac	Homo sapiens
					gctatggaga tccagctgtt ttttgaacta gccctggctt cctccaggg actggtgggtg	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	gccgtcctct actgcttctt caatggggag gtgcagctgg aggttcagaa gaagtggcag	Homo sapiens
					caatggcacc tccgtgagtt cccactgcac cccgtggcct ccttcagcaa cagaccaag	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	gccagccact tggagcagag ccagggcacc tgcaggacca gcatcatctg agaggtgga	Homo sapiens
					gcagggtcac ccacggacag agaccaagag aggtcctgag aggtctggc actgctgtgg	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	gacagccagt cttcccgaca gacacctgtt gtcctccttc agctgaagat gccctcccc	Homo sapiens
					aggccttgga ctcttccgaa ggatgtgag gcaactgtgg gcaggacaa ggcctgggat	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	ttggttcgtt tgctcttctg ggaagagaag ttcagggggtc ccagaaagg acagggaaat	Homo sapiens
					aaatggtgcc tgggatgaga ttc	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	MRPHLSPP1Q QLLLPVLLAC AAHSTGALPR LCDVLQVIME EQDQCLQELS REQTDGLGTE P	Homo sapiens
					QVPVGCCEGMW DNISCPSSV PGRMVEVECP RFLRLMTSRN GSLFRNCTQD GWSETFPRPN	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	LACGVNND SNEKRHSYLL KKKMYTVGY SSSLVMLLVA LGILCAFRRL HCTRNYIHMH	Homo sapiens
					LFVSFILRAL SNFIKDAVLF SSDVTYCDP HRAGCKLV MV LFQYICIMANY SWLLVEGLYL	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	HTLLAISFFS ERKYLQGFVA FGWGSPIFV ALWAIARHFL EDVGCWDINA NASIWIIRG	Homo sapiens
					PVILSILINF ILFINILRIL MRKLRTQETR GNEVSHYKRL ARSTLLLIPL FGIHYIVFAF	
310	4321	Secretin Receptor	Secretin Receptor	NP_002971.1	SPEDAMEIQL FFELALGSFQ GLVVAVLYCF LINGEVQLEVO KKWQOWHLRE FPLHPVASFS	Homo sapiens
					NSTKASHLEQ SQGTCRTSII	

311	4480	Somatostatin NM_001049 Receptor Type 1	atgtttccca atggcaccgc ctctctctct tcctctctctc ctagcccccag ccggggcagc A tgcggcgaag gcggcgccag caggggcccc ggggcccggc ctgcggacgg catggaggag ccaggcgaa atgcgtccca gaacgggacc ttgagcgagg gccaggcgag cgccatcctg atctctttca tctactcctg ggtgtgcctg gtggggctgt gtggaaactc tatggtcatc tacgtgatcc tgcgctatgc caagatgaag acggccacca acatctacat cctaaatctg gccattgtg atgagctgct catgctcagc gtgcccctcc tagtcacctc cagttgtgtg cgccactggc ccttcggtgc gbtgctctgc cgctctgctg tcagcgtgga cgcggtcaac atgttcacca gcattactg tctgactgtg ctacgctgtg accgctacgt ggcggtggtg catcccatca aggcggcccg ctaccgcccg cccaccgtgg ccaaggtagt aaactgggc gtgtgggtgc tatcgtgct cgtcactctg cccatcgtgg tcttctctcg caccgcgcc aacagcgacg gcacgggtggc ttgcaacatg ctcatgccc agcccgtca acgtggctg gtgggcttcg tgttgtaac atttctcatg gcttctctg tgcctgtgg ggtatctgc ctgtgctacg tgcctcatc tgcctaagatg cgcattgtgg cctcaaggc cggctggcag cagcgcaagc gctcggagcg caagatcacc ttaattgtga tgaatgtgtt gatgtgttt gtcatctgct ggaagccttt ctacgtggtg cagctggtta acgtgtttgc tgaacaggac gacgccaagg tgaatcagct gtcggtcatc ctggtctatg ccaacagctg cgccaacccc atcctctatg gcttctctc agacaacttc aagcgtctt tccaaacgcat cctatgcctc agctggatgg acaacggcg gcaggagcgg gttgactatt agccacccg gctcaagagc cgtgcctaca gtgtggaaga cttccaacct gagaacctgg agtcggcg cgtcttccgt aatggcaact gcacgtccc gatacagcgc ctctga 512	Somatostatin NP_001040.1 Receptor Type 1	MFPGNGFASP SSSPSPSPGS CGGGGSRGP GAGAADGMBE PGRNASQNGT LSEGGGSAIL P ISFIYSVVCL VGLCGNSMVI YVILRYAKMK TATNIYILNL AIADLLMLS VPFLVTSTLL RHWPFGLLC RLVLSDAVN MFTSIYCLTV LSVDRYVAVV HPIKAARYRR PTVAKVNLG VWVLSLLVIL PIVFSRTAA NSDGTVACNM LMPEPAQRWL VGFLYTYFLM GFLLPVGAIC LCYVLIIAKM RMVALKAGWQ QRRRSERKIT LMVMVMVMVF VICWMPFYVV QLVNVFAEQD DATVSQLSVI LGYANSCANP ILYGFLSDNF KRSSFQRI LCL SWMDNAAEEP VDYATALKS RAYSVDEFQP ENLESGGVER NGTCTSRITT L	Homo sapiens
312	4480	Somatostatin NP_001040.1 Receptor Type 1	atggacatgg cggatgagcc actcaatgga agccacacat ggctatccat tccatttgac A ctcaatggct ctgtggtgtc aaccaacacc tcaaacccaga cagagccgta ctatgacctg acaagcaatg cagtcctcac attcatctat ttgtgtgtct gcatcattgg gttgtgtggc aacacacttg tcaattatgt catcctccgc tatgccaaga tgaagacctt cccaacatt tacatcctca acctggccat cgcagatgag ctcttcacg tgggtctgccc ttcttggct atgcaggtgg ctctggcca ctggcccttt ggcaaggcca ttgcccgggt ggtcatgact gtggatggca tcaatcagtt caccagcatc ttctgcctga cagtcattgag catcgaccga tacctggctg tgggtccacc catcaagtcg gccaaagtga ggagacccc gagggccaag atgatcacca tggctgtgtg gggagtctct ctgctgtgtca tcttgcccat catgatata gctgggctcc ggagcaacca gtgggggaga agcagctgca ccatcaactg gccaggtgaa tctggggctt ggtacacagg gttcatcatc tacactttca ttctggggtt cctgggtacc ctcaccatca tctgtctttg ctacctgttc attatcatca aggtgaagtc ctctggaatc cgagtggtg cctctaagag gaagaagtct gagaagaagg tcaccggaat ggtgtccatc gtgggtggctg tcttcatctt ctgctggctt ccttcttaca tattcaactg ttcttccgtc	Somatostatin NP_001040.1 Receptor Type 1	MFPGNGFASP SSSPSPSPGS CGGGGSRGP GAGAADGMBE PGRNASQNGT LSEGGGSAIL P ISFIYSVVCL VGLCGNSMVI YVILRYAKMK TATNIYILNL AIADLLMLS VPFLVTSTLL RHWPFGLLC RLVLSDAVN MFTSIYCLTV LSVDRYVAVV HPIKAARYRR PTVAKVNLG VWVLSLLVIL PIVFSRTAA NSDGTVACNM LMPEPAQRWL VGFLYTYFLM GFLLPVGAIC LCYVLIIAKM RMVALKAGWQ QRRRSERKIT LMVMVMVMVF VICWMPFYVV QLVNVFAEQD DATVSQLSVI LGYANSCANP ILYGFLSDNF KRSSFQRI LCL SWMDNAAEEP VDYATALKS RAYSVDEFQP ENLESGGVER NGTCTSRITT L	Homo sapiens
313	4481	Somatostatin NM_001050 Receptor Type 2	atggacatgg cggatgagcc actcaatgga agccacacat ggctatccat tccatttgac A ctcaatggct ctgtggtgtc aaccaacacc tcaaacccaga cagagccgta ctatgacctg acaagcaatg cagtcctcac attcatctat ttgtgtgtct gcatcattgg gttgtgtggc aacacacttg tcaattatgt catcctccgc tatgccaaga tgaagacctt cccaacatt tacatcctca acctggccat cgcagatgag ctcttcacg tgggtctgccc ttcttggct atgcaggtgg ctctggcca ctggcccttt ggcaaggcca ttgcccgggt ggtcatgact gtggatggca tcaatcagtt caccagcatc ttctgcctga cagtcattgag catcgaccga tacctggctg tgggtccacc catcaagtcg gccaaagtga ggagacccc gagggccaag atgatcacca tggctgtgtg gggagtctct ctgctgtgtca tcttgcccat catgatata gctgggctcc ggagcaacca gtgggggaga agcagctgca ccatcaactg gccaggtgaa tctggggctt ggtacacagg gttcatcatc tacactttca ttctggggtt cctgggtacc ctcaccatca tctgtctttg ctacctgttc attatcatca aggtgaagtc ctctggaatc cgagtggtg cctctaagag gaagaagtct gagaagaagg tcaccggaat ggtgtccatc gtgggtggctg tcttcatctt ctgctggctt ccttcttaca tattcaactg ttcttccgtc	Somatostatin NM_001050 Receptor Type 2	MFPGNGFASP SSSPSPSPGS CGGGGSRGP GAGAADGMBE PGRNASQNGT LSEGGGSAIL P ISFIYSVVCL VGLCGNSMVI YVILRYAKMK TATNIYILNL AIADLLMLS VPFLVTSTLL RHWPFGLLC RLVLSDAVN MFTSIYCLTV LSVDRYVAVV HPIKAARYRR PTVAKVNLG VWVLSLLVIL PIVFSRTAA NSDGTVACNM LMPEPAQRWL VGFLYTYFLM GFLLPVGAIC LCYVLIIAKM RMVALKAGWQ QRRRSERKIT LMVMVMVMVF VICWMPFYVV QLVNVFAEQD DATVSQLSVI LGYANSCANP ILYGFLSDNF KRSSFQRI LCL SWMDNAAEEP VDYATALKS RAYSVDEFQP ENLESGGVER NGTCTSRITT L	Homo sapiens

314	4481	Somatostatin NP_001041.1 Receptor Type 2	tccatggcca tcagccccc cccagccctt aaagggcatgt ttgactttgt ggtggtcctc acctatgcta acagctgtgc caaccctatc ctatatgcct tcttgctga caacttcaag aagagcttcc agaattgctt ctgcttggtc aagtgagcg gcacagatga tggggagcgg agtacagta agcaggacaa atcccggtg aatgagacca cggagaccca gaggacccctc ctcaatggag acctccaaac cagtatctga MDMADEPLNG SHTWLSIPFD LNSVWSTNT SNOTEPYYDL TSNVLTFIY FWCIIIGLCG P NTLVIYVILR YAKMKTITNI YILNLAIAD LFMGLGLPFLA MQVALVHWPF GKAIQVWMT VDGINQFTSI FCLTVMISDR YLAWVHPIKS AKWRRPRTAK MITMAVWGS LLVILPIMIY AGLRNQWGR SSCTINWPGS SGAWYTGFI YFIFLGLFVLP LTIICLCYLE IILKVSSGI RVGSSKRKKS EKKVTRMVIS VVAVFIFCWL PFYIFENVSS SMAISPTPAL KGMFDFVVL TYANSCANPI LYAFLSDNEK KSFQNVLCV KVSCTDDGER SDSKQDKSRL NETTETQRTL LNGDLQTSI	Homo sapiens
315	4482	Somatostatin NM_001051 Receptor Type 3	atggacatgc ttcatccatc atcgggtgtcc acgacctcag aacctgagaa tgctctctcg A gcctggcccc cagatgccac cctgggcaac gtgtcggcgg gcccaagccc ggcaggcgtg gccgtcagtg gcgttctgat ccccttggtc tacctgggtg tgcgtgtgt ggcctgctg ggtaactcgc tggatcata tgggttcctg cggcacacgg ccagcccttc agtcaccaac gtctacatcc tcaacctggc gctggccgac gagctcttca tctggtggct gcccttctg gccgccaga agccctgtc ctactggccc ttgggtccc tcatgtgcc cctggtcatg gcgtgtgatg gcataacca gttcaccagc atattctgcc tgactgtcat gacgtggag cgctacctgg ccgtggata tcccaccgc tcggcccgct ggcgcacagc tccggtggcc cgacagtcga gcgcggtgt gtgggtggcc tcagccgtgg tgggtgtgcc cgtggtgttc ttctcgggag tgcccccgcg catgagcacc tgcacacatg agtgcccga gccggcggcg gcctggcgag ccggcttcat catctacacg gccgcactgg gcttcttcgg gccgtgctg gtcatctgcc tctgtacct gctcatcgtg gtgaaggtgc gctcagctgg gcgcgggtg tgggcaccct cgtgccagcg gcgcggcgc tccgaacgca ggtcacgcg catggtgtg gccgtgtgg cgctcttctg gctctgctgg atgcccttct acgtgctcaa catgctcaac gtggtgtgcc cactgcccga ggagcctgcc ttctttgggc tctacttctt ggtggtggcg ctgccctatg ccaacagctg tgccaacccc atcctttatg gcttctcttc ctaccgttc aagcagggtt tccgcagggt cctgctgcgg ccctcccgc gtgtgcgag ccaggagccc actgtggggc ccccgagaa gactgaggag gaggatgagg aggagagga tgggaggag agcagggagg ggggcaagg gaggagatg aacggccggg tcagccagat cagcagcct ggcaccagcg ggcaggagcg gcccccagc agagtggcca gcaaggagca gcagctcta ccccaaagg cttccactgg ggagaagtc agcacgatgc gcacagcta cctgtag MDMLHPSSVS TTSEPENASS AWPEDATLGN VSAGSPAGL AVSGLIPLV YLVVCVGLL P GNSLVIYVVL RHTASPSVTN VYINLALAD ELFMLGLPFL AAQNALSYP FGSLMCRLLM AVDGINQFTS IFCLTVMISVD RYLAVVHPT R SARWRTAPVA RTVSAVWVA SAVVLPVVV FSGVPRGMST CHMOWPEPAA AWRAGFIYT AALGFFGPLL VICLCYLLIV VKRSAGRRV WAPSCQRRR SERRVTRMV AVVALFVLCW MPFYVLIN VVCPLEPEA FFGLYFLVVA LPYANSCANP ILYGFLSYRF KQFRFVLR PSRRVRSQEP TVGPPEKTEE EDEEEDGEE SREGGKGKEM NGRVSQITQP GTSGQERPPS RVASKEQQLL PQEASTGEKS STMIRISYL	Homo sapiens
316	4482	Somatostatin NP_001042.1 Receptor Type 3		Homo sapiens

317	4483	Somatostatin NM_001052 Receptor Type 4	atgagcgccc cctcgacgct gccccccggg ggcgaggaag ggctggggac ggcctggccc A tctgcagcca atgccagtag cgctccggcg gaggcggagg aggcggtggc ggggccccggg gacgcgcggg cggcgggcat ggtcgctatc cagtgcattc acgcgctggg gtgcctgggtg gggtgggtgg gcaacgcctt ggtcatcttc gtgacccaa gctacgcca gatgaagacg gtaccacca tctacctgct caacctggcc gtagecgacg agctcttcac gctgagcgtg ccctcgtgg cctcgtcgcc cgccctgcgc cactggccct tcgggtccgt gctgtgccc gcggtgctca gcgtcgacg cctcaacatg ttcaccagcg tcttctgtct caccgtgctc agcgtggacc gctacgtggc cgtggtgcac cctctgcgc cgcgaccta cggcgggccc agcgtggcca agctcatcaa cctgggcgtg tggctggcat ccctgttggg cactctcccc atcgccatct tcgcagacac cagaccggct cgcgcgggcc agccgtggc ctgcaacctg cagtgccac accggcctg gtcggcagtc ttctgtgtct acacttctt gctgggcttc ctgctgccc gctgggcat tggcctgtgc tactgtctca tcgtgggcaa gatgcgcgc gtggccctgc gcgtggctg gcagcagcg agcgctcgg agaagaaat caccaggctg gtgctgatgg tcgtggtcgt ctttgtgctc tgcgtgatgc ctttctacgt ggtgcagctg ctgaacctcg tcgtgaccag ccttgatgcc accgtcaacc acgtgtccct taccctcagc tatgccaaca gctgcgcca cctattctc tatggcttcc tctcgacaa cttccgcga tccttcagc ggttctctg cctgcgtgc tgcctcctgg aagtgctgg aggtgctgag gaggagcccc tggactacta tgcactgct ctcaagagca aagtggggc aggtgcatg tgccccccac taaaatgcca gcaggaagcc ctgcaaccag aaccggccc caagcgcac ccctcacca ggaccaccac cttctga	Homo sapiens
318	4483	Somatostatin NP_001043.1 Receptor Type 4	GLVGNALVIF VILRYAKMKT ATTIIYLLNLA VADELFMISV PFVASSAALR HWPFGSVLCR P AVLSVDGLNM FTSVFCITVL SVDRYVAVVH QWPHPAWSAV FVYTFLLGF LLPVLAIGLC YLLIVGKMRA IAIFADTRPA RGGQAVACNL VLMVWVFL CWNPFYVQL LNLVVTSLDA TNHVSLLIS VALRAGWQQR RRSEKKITRL VLMVWVFL CWNPFYVQL LNLVVTSLDA TNHVSLLIS YANSCANPIL YGFLSDNERR SFQVLCRLC CLLEGAGGAE EEPLDYYATA LKSKGGAGCM CPPLKQQEA LQPEGRKRI PLRRTTF	Homo sapiens
319	4484	Somatostatin NM_001053 Receptor Type 5	atggagcccc tgttcccagc ctccacgcc agctggaacg cctcctccc gggggctgcc A tctggaggcg gtgacaacag gacgtggtg gggccggcgc cctcggaag ggcggggcg gtgctggtgc ccgtgctgta cctgctggtg tbtgcggccg ggcggggcg gaacacgctg gtcatctacg tgggtgctgc cttcgccaag atgaagaccg tcaccaacat ctacattctc aacctggcag tggcgcagct cctgtacatg ctggggctgc cttccttggc cagcagaac gcggtgctt tctggccctt cggcccgctc ctgtgcgcgc tggtcacgac gctggacggc gtcaaccagt tcaccagtgt cttctgcctg acagtcata gctgggaccg ctacctggca gtggtgcacc cgctgagctc gggccgctgg gggccgctgg gctgggcca gctggcgagc gcgcggcctt ggttctgtc tctgtgcatg tcgctgccc tctgtgtgtt cgcggacgtg caggagggcg gtacctgcaa cggcagctgg ccggagccc tggggctgtg gggcgccgtc ttcatcatct acacggcgt gctgggcttc ttcgcccgc tgcgtgtcat ctgctgtgc tacctgctca tcgtggtgaa ggtgagggcg gcgggctgc cgtgggctg cgtgcggcg cgctcggagc ggaagtgac gcgcatggtg ttggtggtg tgctggtgtt tgcgggatgt tggctgccct tcttaccgt caacatcgt aacctggccg tggcgtgccc ccaggagccc	Homo sapiens

320	4484	Somatostatin NP_001044.1 Receptor Type 5	MEPLFPASTP SWNASSPGAA SGGDNRTL V GPAPSAGARA VLPVLYLIV CAAGLGNTL P VIYVLRFAK MKTVTNIIYL NLAADVLYM LGLPFLATQN AASFWPFGPV LCRLVMTLDG VNQTSVFCL TVMSVDRYLA VVHPLSSARW RRPRVAKLAS AAAWLSLCM SLPLVFEADV QEGGTCNASW PEPVGLWGA VFIYTAVLGF FAPLLVICLC YLLIVVKVRA AGVRVGCVRR RSERKVRMV LVVVLVFAGC WLPFFTVNIV NLAVALQEP ASAGLYFFV ILSYANSCAN PVLVGLSDN FRQSFQKVL C LRKSGAKDA DATEPRPDRI RQQEATPPA HRAAANGLMQ TSKL	Homo sapiens
321	4552	Tachykinin Receptor 1	aattcagagc caccgcgggc aggcgggcag tgcattccaga agcgtttata ttctgagcgc A cagttcagct ttcaaaaaga gtgctgccc taaaaagcct tccaccctcc tgtctgcttt agaaggaccc tgagcccccag gcgccagcca caggactctg ctgcagaggg ggttctgtga cagatagtag gctttacgcc tagcttcgaa atggataaacg tctcccccgt ggaactcagac ctctcccccac acatctccac taacacctcg gaaccaatc agttcgtgca accagcctgg caaatgtgcc ttggggcagc tgctacacg gtcatgtgtg tgacctctgt ggtgggcaac gtgtagtga tgtggatcat cttagccac aaaaagatga ggacagtgc gaactatttt ctggtgaacc tggccttcgc ggagccctcc atggctgcac tcaatacagt ggtgaacttc acctatgctg tccacaacga atggtactac ggcctgttct actgcaagt ccacaacttc tttcccatcg ccgctgtctt cggcagatc tactccatga cggctgtggc ctttgatagg tacctggcca tcatacatc cctccagccc cggctgtcag ccacagccc caaagtggtc atctgtgtca tctgggtctt ggctctctcg ctggccttcc ccagggcta ctactcaacc acagagacca tgcccagcag agtcgtgtgc atgatcgaat gccagagca tccgaacaag atctatgaga aagtgtacca catctgtgtg actgtgtga tctacttct cccctgctg gtgattggct atgcatacac cgtagtggga atcacactat gggccagtga gatccccggg gactcctctg accgctacca cgagcaagtc tctgccaaagc gcaaggtggt caaatgatg attgtcgtgg tgtgcacctt cgccatctgc tggctgcct tccacatctt ctctcctcg ccctacatca acccagatct ctacctgaag aagtttatcc agcaggtcta cctggccatc atgtggctgg ccatgagctc caccatgtac aaccccatca tctactgctg cctcaatgac aggttccgtc tgggcttcaa gcatgccttc cgggtgctgc ccttcatcag cgcgggcgac tatgaggggc tggaaatgaa atccaccgg tatctccaga cccagggcag tgtgtacaaa gtcagccgcc tggagaccac catctccaca gtggtggggg cccacgagga ggagccagag gacggcccca aggccacacc ctgctccctg gacctgacct ccaactgctc ttcacgaagt gactccaaga ccatgacaga gagcttcagc ttctctcca atgtgctctc ctaggccaca gggcttttgg caggtgcagc ccccatgccc tttagacctg cctccctcat gcatggaaat tcccttcac tggaaaccatc agaaacaccc tcacactggg acttgcaaaa agggctcagta tgggttaggg aaaaattcc atccttgagt caaaaaatct caattcttcc ctatctttgc caccctcatg ctgtgtgact caaaccaaat cactgaactt tgctgagcct gtaaaaataa agtcggacc agcttttctt caagagcccc atgcattcca ttcttggaag tgactttggc	Homo sapiens

322	4552	Tachykinin Receptor 1	NP_001049.1	tgcatgcgag tgctcattc aggatg	MDNVLVPDSD LSPNISTNTS EPNQFVQPAW QIVLWAAAAAYT VIVVTSVUGN VVVMWIIAH P KRMRTVTNYF LVNLAFAEAS MAAFTVNVNF TYAVHNEWY GLFYCKFHNH FPIAAVFASI YSMTAVAFDR YMAIIHPLQ RLSATATKV ICVWLVALL LAFFQGYST TETMPSRVVC MIEWPEHPNK IYEVYHICV TVLIYFLPLL VIGAYTVVG ITLWASEIPG DSSDRYHEQV SAKRKVVRMM IVVCTFAIC WLPFHIFLL PYINPDLYK KFIQOVYLA MWLAMSSTMY NPIIYCCIND RFRLGFKHAF RCCPFISAGD YEGLEMKSTR YLQTQGSVYK VSRLETTIST VVGAEHEEPE DGPKATPSSL DLTSNCSSRS DSKTMTESFS FSSNVLS	Homo sapiens
323	4687	Thrombin Receptor	NM_001992		ggcggggggc gcacagagcc agaggggctt gcgagcggc gctgaggagc cgcggggagg A ggggcccgag cggctccagc gcagagactc tcactgcacg ccggaggccc ctctcctgct ccgcccgcgc gaccgcgcgc cccagtcgcc cccggcccg ctaaccgcccc cagacacagc gctgcgcgag ggtcgcttgg accctgatct taccgtggg caccctgcgc tctgcctgcc gcgaagaccg gctccccgac ccgcagaaat caggagagag ggtgaagcgg agcagcccga ggcggggcag cctcccgag cagcgcgcg cagagcccg gacaatggg ccgcggcgcc tgtgtgtgtt ggcgcctgc ttcagtcgtt gcggccgct gttgtctgcc cgcacccggg ccgcagggcc agaatacaaa gcaacaaatg ccacctaga tccccggtca tttctctca ggaaccccaa tgataaatat gaacctttt gggaggatga ggaagaaaat gaaagtgggt taactgaata cagattagtc tccatcaata aaagcagtc tctcaaaaa caactcctg cattcatctc agaagatgcc tccggatatt tgaccagctc ctggctgaca ctctttgtcc catctgtgta caccggagtg ttgttagtca gcctccact aaacatcatg gccatcgttg tgttcacct gaaaatgaag gtcaagaagc cggcggtgtt gtacatgctg cacttgccca cggcagatgt gctgtttgtg tctgtgctcc cctttaagat cagctattac tttccggca gtgattggca gtttgggtct gaattgttc gcttcgtcac tgcagcattt tactgtaaca tgtacgcctc tatctgtctc atgacagtca taagcattga ccggtttctg gctgtggtg atcccatgca gtccctctcc tggcgtactc tgggaaggcc ttccttctac tgtctggcca tctgggcttt ggccatcgca ggggtagtgc ctctcgctct caaggagcaa accatccagg tgccggggct caacatcact acctgtcatg atgtgtcaa tgaaccctg ctgaaggct actatgccta ctacttctca gccttctctg ctgtctctt ttttgtgccc ctgatcattt ccacggtctg ttatgtgtct atcattcgat gtcttagctc ttcgcagtt gccaacgca gcaagaagtc ccgggctttg ttcctgtcag ctgctgtttt ctgcatcttc atcatttgc tcggaccac aaacgtctc ctgattgcgc attactcatt ccttctcac acttccacca cagaggctgc ctactttgcc tactctctt gtgtctgtgt cagcagcata agctcgtgca tcgacccctt aatttactat tacgcttctt ctgagtgcca gaggtacgtc tacagtatct tatgtgcaa agaaagtcc gatcccgca gttataacag cagtgggag ttgatggcaa gtaaatgga tacctgctct agtaacctga ataacagcat atacaaaaa ctgttaactt aggaagggg actgctggga ggttaaaaaa aaaagtttat aaaagtgaat aacctgagga ttctattagt cccaccccaa actttattga ttcacctctt aaacacacag atgtacgact tgcatacctg ctttttatgg gagctgtcaa gcatgtattt ttgtcaatta ccagaaagat aacaggacga gatgacgggt ttattccaag ggaatattgc caatgctaca gtaataatg aatgtcactt ctggatatag ctaggtgaca tatacactac tacatgtgtg tatatgtaga	Homo sapiens

324	4687	Thrombin Receptor	NP_001983.1	<p> tgtatgcaca cacatatatt atttgcagtg cagtatagaa taggcacttt aaaacactct tccccgcac ccagcaatt atgaaaataa tctctgattc cctgatttaa tatgcaaaagt ctaggttggt agagtttagc cctgaacatt tcatggtgtt catcaacagt gagagactcc atagtttggg ctgtaccac ttttgcaaat aagtgtattt tgaattgtt tgacggcaag gtttaagtta ttaagaggtg agacttagta ctatctgtgc gtagaagttc tagtgttttc aatttaaac atatccaagt ttgaattcct aaattatgg aacagatga aaagcctctg ttttgatag gtagtattt ttacatttt acacactgta cacataagcc aaactgagc ataagtctc tagtgaatgt aggtggcctt tcagagttagg ctattcctga gagctgcatg tgtccgccc cgatggagga ctccaggcag cagacacatg ccagggccat gtcagacaca gattggccag aaccttctt gctgagcctc acagcagtg gactgggccc actacattg ctccatctc ctgggattgg ctgtgaactg atcatgttta tgagaaactg gcaaaagcaga atgtgatatc ctaggaggtg atgacacatg aagacttctc taccatctt aaaaacaacg aaagaaaggca tggacttctg gatgcccatc cactgggtgt aaacacatct agtagttgtt ctgaaatgtc agttctgata tggaaagcacc cattatggc tgtggccact ccaatagggtg ctgagtgtag agagtggaat aagacagaga cctgcccctca agagcaaat agatcatgca tagagtgtga tgtatgtga ataaatatgt ttcacacaaa caaggcctgt cagctaaaga agttgaaca ttgggttac tattcttgtt gttataact taatgaaaac aatgcagtag aggacatata ttttttaaaa taagtctgat ttaattgggc actatttatt tacaatgtt ttgtcaata gattgtcaa atcaggtttt tttttaagaa tcaatcatgt cagtctgctt agaaataaca gaagaaaaa gaattgacat tgaaatctag gaaaattatt ctataatttc cattactta agacttaatg agactttaaa agcattttt aacctcctaa gtatcaagta tagaaaaatc tcatggaatt cacaagtaa tttggaatt aggttgaac atatctctta tcttacgaaa aaatggtagc attttaaca aaatagaag ttgcaaggca aatgtttatt taaaagagca gcccaggcg ggtggctcac gcctgtaac ccagcacttt gggaggctga ggcgggtgga tcacgaggtc aggatcgga gaccatcctg gctaacacgg tgaaccccg ctctactaaa atgcaaaaa aaattagccg ggcgtgtggg caggcacctg tagtcccagc tactcgggag gctgaggcag gagactggcg tgaacccagg aggcggacct ttagtgagc cgagatcgcg ccactgtgct ccagcctggg caacagagca agactccatc tc MGPRRLILVA ACFSLCGPLL SARTRARRPE SKATNAILDP RSFLLRNPND KYEPFWEDEE P KNESGLTEYR LVSINKSSPL QKQLPAFISE DASGYLTSSW LTLFVPSVYT GFVVSPLPLN IMAIVVFILK MKVKKPAVVY MLHLATADVL FVSVLPFKIS YFSGSDWQF GSELCRFVTA AFYCNMYASI LLMTVISIDR FLAVVYPMQS LSWRTLGRAS FTCLAIWALA IAGVVPVLK EQTIQVPLGN ITTCHDVINE TLLEGYYAYY FSAFSAVFFF VPLIISTVCY VSIIRCLSSS AVANRSKHSR ALFLSAAVFC IFLICFGPTN VLLIAHYSFL SHTSTTEAAY FAYLLCVCVS SISSCIDPLI YYYASSEQR YVYSILCCKE SSDPSSYNS GQLMASKMDT CSSNLNNSIY KKLLT </p>	Homo sapiens
325	4734	Thyrotropin Releasing Hormone Receptor	NM_003301	<p> tagcttcaag ccactgaaga tggaaaacga gacagtcaag gaactgaacc aaacacagct A tcagccacga gcagtggtgg cctagaata ccagtggtc accatcttac ttgtactcat tatttgtggc ctgggcattg taggcaacat catggtagtc ctggttgta tgagaaccaa gcacatgagg accccacaa actgtacct ggtgagcctg gcagtagctg atctcatggt cttgggtggc gcaggcctcc ccaacataac agacagtatc tacggttctt gggtctatgg </p>	Homo sapiens

244/448

326	4734	Thyrotropin Releasing Hormone Receptor	NP_003292.1	<p>ctatgttggg tgcctctgca ttacttacct ccagtatttg ggaattaatg catcctctttg</p> <p>ttcaataaca gccttttacc ttgagaggta catagcaatc tgtcacccca tcaaaagccca</p> <p>gtttctctgc acattttcca gagccaaaaa gattatcatc tttgtctggg ctttcacatc</p> <p>tctttactgt atgctctggg tcttcttggt ggatctcaat attagcacct acaagatgc</p> <p>tattgtgata tctgtgggt acaagatctc caggaattac tactcaccta tttacctaat</p> <p>ggactttggg gtcttttatg ttgtgccaat gatcctgggt accgtcctct atggattcat</p> <p>agctagaatc cttttcttaa atccattcc ttcatgacct aaagaaaact ctaagacatg</p> <p>gaaaaatgat tcaaccatc agaacacaaa tctgaatgta aatacctcta atagatgttt</p> <p>caacagcaca gtatcttcaa ggaagcaggt caccaagatg ctggcagtggt ttgtaattct</p> <p>gtttgccctt ttatggatgc cctacaggac tctagtgggt gtcaactcat ttctctccag</p> <p>tcccttccaa gaaaattgggt ttttgcctct ttgcagaatt tgcatttate tcaacagtgc</p> <p>catcaaccgg gtgatttaca atctcatgtc ccagaaattc cgtgcagcct tcagaaagct</p> <p>ctgcaactgc aagcagaagc caacagagaa acctgctaac tacagtgtgg cctaaaatta</p> <p>cagcgtcatc aaggagtcag accttttcag cacagagctt gatgatatca ctgtcaactga</p> <p>cacttacctg tctgccacaa aagtgtcttt tgatgacacc tgcctggcctt ctgaggtatc</p> <p>ctttagccaa agttgattca tgaattagaa gaaaatggat gacaaaagaa ttgagaatct</p> <p>gtgcagtcac caacaaaagg gagaacatgg ccaatagtca tatgtgaaga cagagcagat</p> <p>cagctcttgt caatgctcta acaaacccg</p>	Homo sapiens
327	4944	Angiotensin II Type 1 Receptor	NM_000685	<p>LVLIICGLGI VGNIMVLV MRKHMRTPT P</p> <p>NCYLVS LAVA DLMLVAAGL PNITDSIYGS WYGYVGLC ITYLQYLGIN ASSCSITAFI</p> <p>IERYIAICHP IKAQFLCTFS RAKKIIIFW AFTSLYCLMW FFLDLNIST YKDAIVISCG</p> <p>YKISRNYSP IYLMDFGVF VVPMILATVL YGFIARILFL NPIPSDPKEN SKTWKNDSTH</p> <p>QNTNLNVNTS NRCFNSTVSS RKQVTKMLAV VILFALLWM PYRTLAVVNS FLSSPFQENW</p> <p>FLLCRICIY LNSAINPIY NLMSQKFRAA FRKLCNCKQK PTEKPANYSV ALNYSVIKES</p> <p>DHFSTELDDI TVTDITYLSAT KVSFDDTCLA SEVSFSQS</p> <p>attegagact gcctcctcgc caatgattcc agcgcctgac agccaggacc ccaggcagca A</p> <p>gcgagtga ca ggacgtctgg accggcgcgc cgctagcagc tctgccgggc cggcgcggtg</p> <p>atcgatgggg agcggctgga gcggaccag cgagtggagg cgacacagcg ggacgccgag</p> <p>cggcgggcg ggagaccgc accagcgag cggccctcg cggggacgtg acgcagcgcc</p> <p>cggggcgcg gttgatatt tgacaaaattg atctaaaatg gctggggttt tatctgaata</p> <p>actcactgat gccatcccg aaagtgcga ccagggtgat ttgatatagt gtttgcaaca</p> <p>aattcgaccc aggtgatcaa aatgattctc aactctcta ctgaagatgg tattaaaaga</p> <p>atccaaagatg attgtcccaa agctggaagg cataattaca tattgtcat gattcctact</p> <p>ttatacagta tcatctttgt ggtgggaata tttggaaaca gcttgggtgt gatagtcatt</p> <p>tactttata tgaagctgaa gactgtggcc agtgttttcc ttttgaattt agcactggct</p> <p>gacttatgct ttttactgac ttggccacta tgggtgtgtc acacagctat ggaataccgc</p> <p>tggccctttg gcaattacct atgtaagatt gcttcagcca cgctcagttt caacctgtac</p> <p>gctagtgtgt ttctactcac gtgtctcagc attgatcgat acctggctat tgttaccaca</p> <p>atgaagtccc gccttcgacg cacaatgctt gtgacaaaag tccctgcat catcatttgg</p> <p>ctgctggcag gcttggccag ttggccagct ataatccatc gaaatgtatt tttcattgag</p> <p>aacaccaata ttacagtttg tgctttccat tatgagtccc aaattcaac ccttccgata</p>	Homo sapiens

328	4944	Angiotensin II Type 1 Receptor	NP_000676.1	<p> gggctgggccc tgacacaaaa tatactgggt ttctgtgttc cttttctgat cattcttaca agttatactc ttatttgga ggcctaaag aaggttatg aaattcagaa gaacaaacca agaaatgatg atatttttaa gataattatg gcaattgtgc ttttctttt cttttcctgg attcccacc aaatattcac ttttctggat gtattgattc aactaggcat catacgtgac tgtagaattg cagatatgtt ggacacggcc atgcctatca ccatttgat agcttatttt aacaattgcc tgaatcctct tttttatggc tttctgggga aaaaatttaa aagatatattt ctccagcttc taaaatatat tccccaaaa gccaaatccc actcaaacct ttcaacaaaa atgagcacgc ttctctaccg cccctcagat aatgtaagct catccacca gaagcctgca ccatgttttg aggttgatg acatgttcga aacctgtcca taaagtaatt ttgtgaaaga aggagcaaga gaacattcct ctgcagcact tcactaccaa atgagcatta gctacttttc agaattgaag gagaaaaatgc attatgtgga ctgaaccgac ttttctaaag ctctgaacaa aagcttttct ttcttttgc aacaagacaa agcaaaagcca cattttgcat tagacagatg acggctgctc gaagaacaat gtcagaaact cgatgaatgt gttgattga gaaattttac tgacagaaat gcaatctccc tagctgctt ttgtcctgtt attttttatt tccacataaa ggtattttaga atatattaaa tcgttagagg agcaaacagga gatgagagtt ccagattgtt ctgtccagtt tccaaaggcc agtaaaagtt tcgtgcgctt tttcagctat tagcaactgt gctacacttg cacttggtac tgcacatttt gtacaaagat atgctaagca gtagtctgca agttgcagat ctttttgtga aattcaacct gtgtcttata ggtttacact gccaaacaaa tgcccgttaag atggcttatt tgtataatgg tgttactaaa gtcacatata aagtttaaac tacttgtaaa ggtgctgcac tgggtcccaag tagtagtgct ctcctagat attagtttga tttaatatct gagaagtga tatagtttgt ggtaaaaaga ttatatatca taaagtatgc cttctgtttt aaaaaaagta tatattctac acatatatat atatgtatat ctatatctct aaactgctgt taattgatta aaatctggca aagttatat tactttaaaa taaaaataatt ttattgg </p>	Homo sapiens
329	4946	Angiotensin II Type 2 Receptor	NM_000686	<p> FYGFLGKKFK RYFLQLLKYI PPKAKSHSNL STKMSTLSYR PSDNVSSSTK KPAPCFEVE acgtcccagc gtctgagaga agagtaagc aagaattcaa agcattctgc agcctgaatt A ttgaaggagt gtgttttagc actaagcaag ctgattttatg ataactgctt taaactcaa caaccaaaag cataagaact aggagctgct gacatttcaa tatgaaggcc aactccaccc ttgccactac tagcaaaaac attaccagcg gtcttccatt cgggctgtg aacatctctg gcaacaaatga gtctaccttg aactgttcac agaaaccatc agataagcat ttagatgcaa ttcctattct ttactacatt atatttgtaa ttggatttct ggtcaatatt gtcgtggtta cactgttttg ttgtcaaaag ggtcctaaaa aggtttctag catatacatc ttcaacctcg ctgtggctga ttactcctt ttggctactc ttctctatg ggcaacctat tattcttata gatatgactg gctctttgga cctgtgatgt gcaaaagttt ttggttcttt cttaacctga acatgtttgc aagcattttt ttatcacct gcataagtgat tgataggtag caatctgtca tctacccctt tctgtctcaa agaagaaatc cctggcaagc atcttatata gttcccttgg </p>	Homo sapiens

330	4946	Angiotensin II Type 2 Receptor	NP_000677.1	<p> tttggtgtat ggcctgtttg tcttcattgc caacatttta ttttcgagac gtcagaacca ttgaatactt aggagtgaat gcttgcatTA tggctttccc acctgagaaa tatgcccatt ggtcagctgg gattgcctta atgaaaaata tcttgggttt tattatccct ttaatatcca tagcaacatg ctatttttga attagaaaac acctactgaa gacgaatagc tatgggaaga acaggataac ccgtgaccAA gtcctgaaga tggcagctgc tgttgttctg gccttcacca tttgggtcct tcccttccat gttctgacct tccctggatgc tctggcctgg atgggtgtca ttaatagctg cgaagtata gcagtcattg acctggcact tccctttgcc atcctcttgg gattcaccaa cagctgcgtt aatccgtttc tgtattgttt tgttggaac cggttccaac agaagctccg cagtgtgttt aggtttccaa ttacttggct ccaagggaac agagagagta tgtcttgccg gaaaagcagt tctcttagag aaatggagac ctttgtgtct taaacggaga gcaaaatgca tgtaataaac atggctactt gctttgagc tcaccagaat tatttttaag tggttttaat aaataataa aatttccct aatcttttct gaatcttctg aaaccaaag taactatgtt tatcgtccag tgactttcag gaatgccat tgttttctga tatgtttgtA caagatttca ttggtgagac atatttaca cctagaagta actggtgata tatctcaaat tgtaattaat aatagattgt gaataatgat ttggggattc agatttctct ttgaacatg cttgtgttcc ttagtgggtt ttatatcca tttttatcag gatttctctc tgaaccagaa ccagtcttcc aactcattgc atcatttaca agacaacatt gtaagagaga tgagcacttc taagttgagt atattataat agattagtagc tggattattc aggttttagg catatgcttc tttaaaaacy ctataaatta tattctctct gcatttcaat tgagtggagg ttatagtta atctataact acatatgaa taggctagg aatatagatt aaatcatact cctatgcttt agcttatttt tacagttata gaaagcaaga tgtactataa catagaattg caatctataa tatttgtgtg ttcaactaac tctgaataag cactttttaa aaaaactttct actcatttta atgattgttt aaaggtttct attttctctg atactttttt gaaatcagta aacactgtgt attgtgttaa aatgtaaaag tcacttttca catccttgac tttttagatg tgctgctttg atatatagga cattgatttg atttttatta ttaatgcttt ggttctgggt tgtttcctaa aatatctggg tggcttaaaa aaaactcttt aacttgaat aaaccttaa ctggcatagg aaatggtatc cagaatggaa ttttgtaca tgggttctgg gtgggggcaa agagacccag tcaattacat gtttgggtacc aagaaaggaa cctgtcaggg cagtacaatg tgactttgaa aatataacc gtgggggtag ttttacccta tatctataaa cactgtttgt tccagaatct gtatgattct atggagctat tttaaaccaa ttgcaggtct aga MKGNSTLATP SKNITSGLHF GLVNISGNNE STLNCQKPS DKHLDAIPIL YYIIFVIGFL P VNIVVTLFC CQKGPVKVSS IYIFNLAVAD LLLLATPLW ATYYSRYDW LFGPVMCKVF GSFLTLNMEA SIFFITCMSV DRYQSVIYFP LSQRNPWQA SYIVPLVWCM ACLSSLPTFY FRDVTIEYL GVNACIMAFP PEKYAQWSAG IALMKNILGF IIPLIPIATC YFGIRKHLK TNSYGNRIT RDQVLKMAA VVLAFLIWL PFHVLTFDLA LAWMGVINSC EVIAVIDLAL PFAILLGFTN SCVNPFLYCF VGNRFQKLR SVFRVPIITWL QGKRESMSR KSSSLREMET FVS </p>	Homo sapiens
331	5072	Pyrimidinerg ic Receptor P2Y4	NM_002565	<p> atggccagta cagagtccct cctgttgaga tccctaggcc tcagcccagg tccctggcagc A agtgggtgg agctggactg ttggtttgat gaggatttca agttcatcct gctgcctgtg agctatgcag ttgtctttgt gctgggcttg ggccttaacg ccccaacct atggctcttc atctccgcc tccgacctg ggatgcaacg gccacctaca tgttccacct ggcattgtca </p>	Homo sapiens

332	5072	Pyrimidinerg NP_002556.1 ic Receptor P2Y4	gacacctgt atgtgtgtc gctgcccacc ctoatctact attatgcagc ccacaaccac tggcccttg gcaatgagat ctgcaagttc gtccgcttc tttctattg gaacctctac tgacgtgtcc tttctctcac ctgcatcagc gtgcacgct acctgggcat ctgccacca cttcgggcaac tacgtgggg cgccctcgc ctgcagggc tttctgctt ggcagtttgg ttggtcgtag ccggtgctt cgtgcccac ctgttcttg tcacaaccag caacaaaggg accaccgtcc tgtgccatga caccactcg cctgaagagt ttgaccacta tgtgcacttc agctcgggg tcatggggt gctctttggc gtgccctgc ttggtcactct tgtttgctat ggactcatgg ctgctgcct gtatcagccc ttgccaggt ctgcacagtc gtctctcgc ctccgtctc tccgcacat agctgtggtg ctgactgtct ttgctgtctg cttcgtgcct ttccacatca cccgcacat ttactacctg gccaggctgt tggaagctga ctgcgagta ctgaacattg tcaacgtggt ctataaagt actcgcccc tggccagtc caacagctgc ctggatcctg tgcctactt gctcactggg gacaaatc gacgtcagct ccgtcagctc tgtggtggtg gcaagccca gcccgcacg gctgcctctt ccctggcact agtgcctcg cctgaggata gcagctgcag gtggggggc acccccagg acagtagctg ctctactct agggcagata gattgtaa	EDFKFILLPV SYAVFVLGL GLNAPTILWF P LIYYAAHNH WPFGEICKF VRLEFYWNLY LIVAGCLVPN LFFVTSNKG GLMARRLYQP LPSAQSSSR LNIVNVYKV TRPLASNSC PEDSSCRWAA TPQDSSCSTP	Homo sapiens
333	5117	Vasopressin NM_000706 V1A Receptor	taattgcttg aaggattttt tccagacagg tggctggaa accttttacc tattaccttc A catccctgaa ccatttcaat ctctgcctc ctggatatct tggagaaaa gaaccaaac aacacagctt tcagttttta gagcatttcc ccatacaga acattgtctt acttgatctt ccgatgacc tcaacaacag gaaaggcagg tcttttcat tccatttata agacgcacag acccaggatt atctagccac aggaagcagg actccagatt tcaagtccag catctcaacg tgacaaacctt ggtaaactcg catgaacgga ctggatagta aagtggaaatt attactgaga actgcaatga ataaatctt ttgcattttt tgcctacgtt tcacagaggg tgataatttt ctgagggcaat taaatttata ccacggccac aatactgaaa cgttctgacc acaaaagtca tgctcctgca tctacacagc agataactgc agaaacggct tcttttctc ctgtaaaaat tgcctgaaaa cagctcccc ttgtgtgccc tcgaggcata tcttcaccaa cgttaaaaca gagctgagg agatcgcatt tctgcctccc tcccgccctg cagaggggt ccagctgttc agagtaacgg attactaggt aggtggttgt tccccctct tcccagggtc tcttctctt ctttgagatt gcctcttct tactcctgag cacaggagcc gggcggttct tctgtccctt gccctggaca gcaactgctg gatggcgtg gtccggcagc tgctcttctt ccccaaaa agatgtcccc acgactcagt agtaaccaga cgggtccccc ggaccactgc ggcacaaattt ccgccatccc cgctgtggga atcaggcttt tcccgacaga aacccaggga atctagagaa aactccttaa gtccctagtc tccatagaga aaacccaggag acactcccc caaacccgc tgtgaatata ggcacagcag cactggggc ctgaaagtga tgagtgcgtt cttcccgctg caaacatagg gtaataaata gcatgcatca aagacgttac taggaagaga tagctcttta	acatttttcc ccatacaga tccatttata actccagatt ctggatagta tgctacgtt aatactgaaa agaaacggct tcttttctc tcttcaccaa cgttaaaaca cagaggggt tcccagggtc tcccagggtc ggcggttct tgctcttct cccaaaa ggaccactgc ggcacaattt aacccaggga acactcccc ctgaaagtga taggaagaga tagctcttta	Homo sapiens

agtcacgagg ggggagaaat gtttgccccg ggaataattg cctgggggaat aaaatttgcc
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334	5117	Vasopressin V1A Receptor	NP_000697.1	PSGNSSPWPP	LATGAGNTSR	EAEALGEGNG	PPRDVRNEEL	AKLEIAVLAV	P	Homo
				TEFAVAVLGNS	SVLLALHRTF	RKTSRMHLFI	RHLSLADLAV	AFQVLPQMC	WDITYRFRGP	sapiens
				DWLCRVVKHL	QVFGMEASAY	MLVVMTADRY	IAVCHPLKTL	QQPARRSRRLM	IAAAWVLSFV	
				LSTPQYFVFS	MEIEVNNVTKA	RDCWATFIQP	WGSRAYVTWM	TGGIFVAPVV	ILGTCYGFIC	
				YNIWCNVRGK	TASRQSKGAE	QAGVAFQKGF	LLAPCVSSVK	SISRAKIRTV	KMTFVIVITAY	
				IVCWAFEFII	QMWSVWDPMPS	VWTESENPTI	TITALLGSLN	SCCNPWIMYMF	FSGHLLQDCV	
				QSFPCQNMK	EKENKEDTDS	MSRRQTFSYN	NRSPNTSGM	WKDSPKSSKS	IKFIPVST	
				ctccagccgc	tgctcaccag	gcagagccag	cgggctggc	tggggcttcc	tgccctgagc	A
				gcgacaccga	ctgctccgga	ccgcccctcc	aagcagctcg	aaggccttcc	gcctttggct	
				tccagaaaa	tttggagaaa	gagaatttga	ggcggattgg	aggggtgtag	ccctcccca	
				gccttcttcc	tctccagaaa	gectcactct	gcacagctc	ccccattctt	cccgctccta	
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				ccaagatccg	aacagtgaag	atgacctttg	tcctcgtgct	ggcctacatc	gcttgctggg	
				ctccccttctt	cagtgtccag	atgtgggtccg	tggtgggacaa	gaatgcccc	gatgaagatt	

335 5118 Vasopressin
V1B Receptor

Homo
sapiens

336	5118	Vasopressin V1B Receptor	NP_000698.1	<p>ccaccaatgt ggctttcacc atctctatgc ttttggggcaa cctcaacagc tgctgcaacc cctggatcta catgggttc aacagccacc tgttacccgc gcccctgcgt caccttgccct gctgtggggg tccccagccc aggatgcgc ggcggtcttc cgaaggcagc ctctcgagcc gccacaccac gctgctgacc cgctccagct gccggccac cctcagcctc agcctcagcc taacctcag tgggaggccc aggcctgaag agtcaccaag ggacttggag ctggcagatg gggaaggcac cgctgagacc atcatctttt aggaagact cgctggggtc tggtagctgc cccaggacta gtggaggttc tctgccacc tcaaggactg gaaatgagag ctgggaggggt aagggttggg gtagaggag gccctgtctg aagcagagcc aaaaggccag aatgggtccc ctacctggt gtcacagctg cccctagtgt gagggctgcc tcataagctc ccaatctcag acctggcag tcaggagaa tcaaacctgc tgtctccctg gtcctgccat attcataggg tgtccatgca cacatggtgt cccagatcta ggcaggccta ggatggtgct gtctaggggt ccacgggtgg caggaattca gaggtggcc ttgtgccctg gctacctgtc tccattctaa ctgactggc acatctcagc ctaaccagga gagggagaa gtgaaaaacc gtgaggagga ctctatttgg atcctggatt tgttgttgtt gttgttgttg ttgttagaga gaa</p> <p>MDSGPLWDAN PTPRGTLAP NATTPWLGRD EELAKVEIGV LATVLVLATG GNLAVLLTLG P QLGRKSRMH LEVLHLALTD LAVALFQVLP QLLWDITYRF QGPDLLCRV KYIQVLSMFA STYMLLANTL DRYLAVCHPL RSLOQPGQST YLLIAAPWLL AAIFSLPOVF IFSLREVIQG SGVLDCWADF GFWGPRAYL TWTLIAIFVL PVTMLTACYS LICHEICKNL KVKTOAWRVG GGWRTWDRP SPSTLAATTR GLPSRVSSIN TISRKIRTV KMTFVIVLAY IACWAPFFSV QWWSVWDKNA PDEDSTNVAF TISMLIGNIN SCCNPWYMG FNSHLLPRPL RHLACCGGPQ PMRRRLSDG SLSSRHTTLL TRSSCPATLS LSLSLTISGR PRPEESPRDL ELADGEGTAE</p>	Homo sapiens
337	5119	Vasopressin V2 Receptor	NM_000054	<p>agaagatcct gggttctgtg catcctgtctg tctgaccatc cctctcaatc ttccctgccc A aggactggcc atactgccac cgcacacgtg cacacagccc aacaggcatc tgccatgctg gcatctctat aagggtccca gtccagagac cctggggcat tgaacttgct cctcaggcag aggctgagtc cgcacatcac ctccaggccc tcagaaacac tgcccagcc ccacatgct catggcgtcc accacttcg ctgtgcctgg gcatccctct ctgcccagcc tgcccagcaa cagcagccag gagaggccac tggacacccg ggaccctgtg ctagcccggg cggagctggc gctgctctcc atagtctttg tggctgtggc cctgagcaat ggctgggtgc tggcggccct agctcggcgg ggcggcgggg gccactgggc accatacac gtcttcattg gccacttgtg cctggccgac ctggccctgg ctctgttcca agtgcctgcc cagctggcct ggaaggccac cgaccgttc cgtgggccag atgcccctgtg tcggggccgtg aagtatctgc agatggtggg catgtatgcc tctctctaca tgatcctggc catgacgctg gaccgccacc gtgccatctg ccttcccatg ctggcgtaac gccatggaag tgggggtcac tggaaaccggc cgtgtgctagt ggcttgggcc ttctcgctcc ttctcagctt gcccagctc ttcatcttcg cccagcgcaa cgtggaaggt ggcagcgggg tcaactgactg cctggcctgc ttgctggagc cctggggccc tcgaacctat gtcacctgga ttgcccctgat ggtgttcgtg gcacctaccc tgggtatcgc cgctggccag gtgctcatct tccgggagat tcatgccagt ctggtgccag ggcctatcga gaggcctggg ggcgcgccga ggggacgccg gacaggcagc cccggtgagg gagccccagt gtcagcagct gtggccaaga ctgtgaggat gacgctagt attgtggctg tctatgtgct gtgctgggca cccttcttcc ttggtgcagct gtggggccgcg tgggacccgg aggcacctct</p>	Homo sapiens

338	5119	Vasopressin V2 Receptor	NP_000045.1	MLMASTTSADV ALARRGRRGH VGMYASSYMI RNVEGSGVTV SERPGGRRRG PLEGAPFVLL ASSSLAKDTS	PGHPSLPSLP WAPIHVFIGH LAMTLDHRHA DCWACFAEPW RRTGSPGEGA HVSAAVAKTV NMWIASFSS SVSSELSRLS CCARGRTPPS	TRDPLLARE LALLSIVFVA VALSNGLVLA	P	Homo sapiens
339	5133	Peropsin	NM_006583	gaataagcct ataaattagg aacacaatat taatagttct ttattaaact cctcagatct tgaatatatt acctgacct tgattctggg ctagttatgc gatcctttgt tgatgtttta gcactgagtc tcatgatctg cttttggtga aatcttctac caatgcttgc ccatggatgt acgctatcaa gatcaagtgc tgcttccgtt acttattgct	tcgataatta caacagttca tggtgcaact gggcatcttc ggctgttact gtatggaaat ttttggaaat ctgccttct agcctggatc ccagatcct gtcttacacc ctgtattac cctcaacaga catgtttctg cccaagaag attctctccc cctgcattt tgctagactc atctcaaac aacactttag agacatggat tgctgactct catctccttt	tgaagggtgt gactctaaaa tacttgatta attaagtaca gatatagggg tgaaaatttg gcaagcattg gactagggga aatggcctgt actggtgcta atgacagtta catgtcacgc gactggtcag gtggcatggg gtggcatggg atctctctg ccatggccat cctgcattt tgctagactc tggaagaat tttttgaca catgttctta tgatagtgta gtgtatgcta gatgaattag gcatcagagg ttaagggtcc	tcctccaaa ctcggctctt gataagtatt gacaccaca tggtatccc ctgtcaggt gtcgtggct caccaacact gatgcctatc aaactggagg ttttattgtg acatcacact tgtaacaaa catcgtgtgc catagctcca taataaaaa gcctgtgaca ctgaaaataag tttaaatatg agctcctcaa gtcgtgtgac gtatgtgctc ctcgtgtgac	atgtaagaa tcacagactg atcagcaaca aatgcaatta atgtctgctg tatgtctggat gtggaccgat tacatcggct atagggtggg aaaaatgata cccttgacag accagtgcac atgtctgtga ttatgggctt ctgtgtgac ctgtttgcaa tttcggaggg agatattttac agaaaaggac agcccattta gcacagctcg tgatatatca ctttctttct

340	5133	Peropsin	NP_006574.1	ccctattatg gcatgcatta cactgtactg atgaccttta acttgccctg ctcc	Homo sapiens
				MLRNILGNSS DSKNEDGSVF SQTEHNIVAT YLIMAGMISI ISNIIVLGIF IKYKELRTPT P NAIIINLAVT DIGVSSIGYP MSAASDLGYS WKFGYAGCQV YAGLNIFFGM ASIGLLTVVA VDRYLITICLP DVGRRTTNT YIGLILGAWI NGLFWALMPI IGWASYAPDP TGATCTINWR KNDRSFVSYT MTVIAINFIV PLTMFYCYH HVTLSIKHHT TSDCTESLNR DWSDDIDVTK MSVIMICMFL VAWSPYSIVC LWASFGDPKK IPPPMALIAI LFAKSSSTFYN PCIYVVANKK FRAMLAMFK CQTHQTMPTV SILPMDVSQN PLASGRI	
341	5519	Brain-Specific Angiogenesis Inhibitor 1	NM_001702	ggactttaga agccgttgct gcctctctg tcaactgaag cggggccctc tccatccca A cccttgccc gcctccctgc cccacccgg cggccctgc cgcgcgcgg acctggcat gtcaagacct ggtccgcgc tgcctgccc gcccgcgga ccccgcgcc gctgctactg aggaatgagg gccaggccgc cgcgcgcgg cgcgcgcgg gagcagacgc ggggcccggg ctgctgctgc tgcggggacg ccgcgcgcg ggtgcaggga aagtctctgc gctacttctc cgcggccgc cccgagccgt gcgccacgt gcgtgctcc tggacgctac gcaacccgga cccgcggcgc gtgttcccg ccaacgcctc gcgtgctcc ggcaaggcg ccgtgccct gcagcgccc cggccgcgtg tacactctc acatgaaggt agtccgactc ctctctcgag tccacgcga cctacctgg cgtggagagc cgacctacc agtccgactc ctctctcgag ctgcgacccc tccgacccc tggccttctc gcaggccagc ttcgacgagg tgcgcgggt tgcagatgcg gcgccagcag cgcgccccc cgcggccccc aagcagttcc tgcagatgcg gcgacgactc tccgtggagt acctggtggt ggggaacgc gcccggccgc cgggcccac cgacgactc tccgtggagt acctggtggt ggggaacgc aaccacagcc gtgcgcctg ccagatgctg tgcgcctggc tggacgctg tctggccgtg agtgcagct cgcacccctg cgggacatg cagacccctc gcgcctgctt gggcgcgag gcccggccgc ctgcgcggg accctgccc ctgcctacc agcctgaccc agcacgggg cgggacacgc gtggctggtg gccctgaaa gtggtccctg tgggtccctg tggggcgaaat gcacgcggga ctgcggggga gccacaggcg gctggaagct cactgcctg cccgcgcgc cgcgtggagg cctgcggccc cgtggcgc ggcctccaga cgcggacgcg tgcacagtg cctgcggtc acacgcgag cctgcggccc cgtggcgc gagggggtgc tggaggaggg tgcacagtg cctgcggtc acagatgccc ggcggcgga gagctggg accagctccc ggagccagtc cctgcggtc gtcccagcc cccagaccg gtgacccag agccgaggag gacgagctgc agcagtttgg gtcccagcc cccagaccg tgcggcgagg gctggcagac cgcacgcgc tgggtccctg ggagcgtgtg ctcacgacc cagcacgcag tgcagcgga cctgcgcga gcagcgctg ttctgcgtgt cctcctcta cagcacgcag cccagtcggt ggtgcctgg atgagtgtc gccctggagc tgcaacaact ctgcctgtg cccagtcgct cgggacgca cgcgcacctg caggccccc ctctgctcca gcacctgtg cagggccct tgaggccct gagaagcaaa ccaagttctg caaatgtcc cagtttgggg gcaacccctg tggggccct tgaggccct gagaagcaaa ccaagttctg caaatgtcc ctgtgccctg gccgggcagt ggatggaaac tggaaatgagt ggtcgagctg gagcgctgc tccgccagct gctccaggg ccgacagcag cgcacgcgtg aatgaacgg gccttctac gggggtgcgg agtgcaggg ccaactgggt gagaccgag actgcttct gcagcagtc ccagtggatg gcaagtggca ggcctggcg tcatggggca gttgcagct cactgtggtg gctggcagcc agcagcggga gcgtgtctgc tctggccct tcttggggg agcagcctgc cagggcccc aggatgagta ccggcagtc gcgacccagc ggtgtccga gcccagag atctgtgatg aggaacactt tgggtgctgt atctggaaag agacccagc gggagagggtg	Homo sapiens

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254/448

342	5519	Brain-Specific Angiogenesis Inhibitor 1	NP_001693.1	<p> cccccccc agcagccctt gccccacag cccaatctgg agcgggaccc cccagcctg gggatcccg gggagcctgc cggccatccg ggaccacga cggggccccc caccaagaac gagaatgtcg ccactttgtc tgtagctcc ctggagcggc ggaagtgcgc gtatgcagaa ctggactttg agaagatcat gcacaccccg aagcggcacc aagacatgtt ccaggacctg aacgggaagc tgcagcacgc agcggagaag gacaaaggag tgctggggcc ggacagcaag ccgaaaaagc agcagacgcc caacaagagg ccttgggaga cctccggaa agccacagg acgccacgt gggtaagaa gagctggag ccgctgcagc cgtcccgct ggagcttcgc agctggagt gggagaggtc gggcgccacg atcccgctgg tgggccagga catcatcgac ctccagaccg aggtctgagc gggctggcgg cggccacgca ctgggccacg gaggagggat gctgtccgc ccgtcctgc cgcagacggg cacagacacg ctgcgggca cggggccagg ccgcacccc ggcctcaggg cgctcagac gggccaggc acagggcccg cagtctggg accagagcca gatgcaggac aggagggcg cggccacg cgcacaggc accagagcc gaagtgctt cagactccg cctcctcgg cggagccca cggggcagat gggcggaagg ctgtggaccg tggacaggcc cagcggggc agcgtcccg ggtaccggc tgagctcctg ctgcggagga gctgctgctt gggccgggc cgcctggcac cgttttttaa acacccccat ccctcgggaa gcagccagct cccacacct tccaggggc taggcctc ctagaccccag gtggagggca cagccctccg accctcatg ccccgaggg caggactgag tccctccag gaagaagcag gggggaatct attttctc tcctttctt tcttcaata aaagaatta aaaaaacaaa aaaaa </p>	Homo sapiens
				<p> MRGQAAAGP VWILAPLLLL LLLGLRRARA AAGADAGPGP EPCATLVQCK FFGYFSAAV P FPANASRCWS TLNPDPRRY TLYMKVAKAP VPCSGPGRVR TYQDSFLES TRTYLGVESE DEVLRLCDPS APLAFLQASK QFLQMRROQP PQHDGLRPRA GPPGPTDDFS VEYLVVGNRN PSRAACQMLC RWLDACLAGS RSSHPCGIMQ TPCACLGGEA GGPAAGPLAP RGDVCLRDV AGGPENCITS LTQDRGGHGA TGGWKLWSLW GECTRDCGGG LQTRTRICLP APGVEGGGCE GVLEEGROCN REACGPAGRT SSRSQSLRST DARRREELGD ELQQFGFPAP QTGDPAAEEW SPWSVCSSTC GEGWQTRTRF CVSSSYSTQC SGPLREQRLC NNSAVCPVHG AWDEWSPWSL CSSTCGRGFR DRTRTCRPPQ FGNPCGPE KQTKFCNIAL CPGRAVDGNW NEWSSWSACS ASCSQGRQQR TRECNGPSYG GAECQGHWE TRDCFLOQCP VDGKQAWAS WGSCSVTCGA GSQRRERVCS GPFFGAACQ GPQDEYRQC TQRCPEPHEI CDEDNFCABI WKETPAGEVA AVRCPRNATG LILRRCELDE EGIAYWEPPT YIRCVSICYR NIQMTREHL AKAQRLPGE GVSEVIQTLV EISQDGTSYS GDLLSTIDL RNMTEIFRRA YYSPTPGDVQ NFVQILSNLL AEENRDKEE AQLAGPNAKE LFLRVEDEVD VIGFRMKDLR DAYQVTDNLV LSIHKLPSAG ATDISFPMKG WRATGDWAKV PEDRVTVS KS VESTGLTEAD EASVEFVGTV LYRNLGSFLA LQRNTTVLNS KVISVTVKPP PRSLRTPLEI EFAHMYNGTT NQTCILWDET DVPSSSAPPQ LGPWSWRGCR TVPLDALRTR CLCDRLSTFA ILAQLSADAN MEKATLPSVT LIVGCGVSSL TLMLVIIYV SWRYIRSER SVILINFCLS IISNALILI GQTQTRNKVM CTLVAALFHF FFLSSFCWVL TEAQSYMAV TGHLRNRLIR KRFLCLGWGL PALVVAISVG FTKAKGYSTM NYCWLSEGG LLYAFVGPAA AVVLVNMVIG ILVFNKLVS K DIGITDKLKE RAGASLWSSC VWPLLLALTW MSVLAVTDR RSALFQILFA VFDSLEGFVI VMVHCILRRE VQDAVKCRV DRQEEGNGDS GGSFQNGHAQ LMTDFEKDVD LACRSVLNND IAACRTATIT GTLKRPSLPE EEKLKLHAK GPPTNFNSLP ANVSKLHLHG SPRYPGGPLP DFPNHSITLK RDKAPKSSFV </p>	

[illegible]

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344	5520	Brain-Specific Angiogenesis Inhibitor 2	NP_001694.1	<p>ccgcccacac ccagcgcccg ccäagtgccc gagccagggg agcgagccg gaccatgcct</p> <p>cgcacgtgc ccggtctac catgaagatg ggctccctgg agcgaagaa attacgttat</p> <p>tcagacctgg actttgaggt gatgcacacc cggaacacgc attcagaact ctaccacgag</p> <p>ctcaaccaga agttccacac tttcgaccgc taccgacgc agtccacgcg caagagggag</p> <p>aagcgtgga gtgtgtctc ggggtggcg gccgagcgga gcgtgtgcac cgataagccc</p> <p>agccctggg agcgcccgag cttgtcccaa catcgcgcc atcagagctg gacaccttc</p> <p>aaatctatga cactgggctc gctgcccccc aagccccgag aacggctgac tctgcaccg</p> <p>gcagcagcct gggagccac agaaccacg gatggtgact tccagacaga ggtgtgagt</p> <p>ccacgtgga ctgcccactg catataaata tatatatct tctatttca cactccactt</p> <p>tggaaactacc cagagccag cgccctctcc cctctccga ggcctggga gggagcgcc</p> <p>gtggactcag ccaggtggg ggagccggac atggcttggc ctgggtccc agggcccttc</p> <p>ctgtttctc agagggccct cagccactg aacccctct tcagcccagc ctgtccgctc</p> <p>ctgtcccggg ctggggagg gggagggga cttgttggg aataaactt actctgtg</p> <p>MTPACPLLLS VILSLRLATA FDPAPSACSA LASGVLYGAF SLQDLFPTIA SGCSWTLENP P</p> <p>DPTKYSLYLR FNRQEQVCAH FAPRLPLDH YLVNFTCLR SPEEAVAQAE SEVGRPEEEE</p> <p>AEAAAGLELC SGSGPFTFLH FDKNFVQLCL SAEPSEAPRL LAPAALAFR VEVILINNN</p> <p>SSQFTCGVIC RWSEECGRAA GRACGFAQPG CSCPGEAGAG STTTSPGPP AAHTLSNALV</p> <p>PGGPAPPAEA DLHSGSSNDL FTTEMRYGEE PEEPKVKTQ WPRSADEPGL YMAQTGDPAA</p> <p>EEWSPWVCS LTCGQGLQVR TRSCVSPYG TLCSGPLRET PCNNSATCP VHGVWEEWGS</p> <p>WSLCSRSCGR GSRSRMRTCV PPQHGKACE GPELQTKLS RMACPVEGOW LEWGPWGPCS</p> <p>TSCANGTQQR SRKCSVAGPA WATCTGALTD TRECSNLECP ATDSKWGPWN AWSLCSKTCD</p> <p>TGWQRRFRMC QATGTQGYPC EGTGEEVKPC SEKRCPAFHE MCRDEYVMLM TWKKAAGEI</p> <p>IYNKCPPNAS GSASRRCLLS AQGVAYWGLP SFARCISHEY RYLYLSLREH LAKQRMLAG</p> <p>EGMSQVVRSL QELLARTTY SGDLLFSVDI LRNVDTFKR ATYVPSADDV QRFQVVSFM</p> <p>VDAENKEKWD DAQQVSPGSV HLLRWEDFI HLVGDALKAF QSSLIVTDNL VISIQREPVS</p> <p>AVSSDITFPM RRRGMKDWV RHSEDRFLFP KEVLSLSSPG KPATSGAAGS PGRGRPGTV</p> <p>PPGPGHSHQR LLPADPDESS YFVIGAVLYR TLGLILPPPR PPLAVTSRVM TTVTRPPTQP</p> <p>PAEPLITVEL SYIINGTTDP HCASWDYSRA DASSGWDTE NCQTLETQAA HTRCQCQHL</p> <p>TEAVLAQPPK DLTLELAGSP SVPLVIGCAV SCWALLTLA IYAAFWRFK SERSIILLNF</p> <p>CLSLILASNIL ILVGQSRVLS KGVCTMTAAE LHFFFLSSFC GTSSYCWLSL EGGLEYAFVG</p> <p>LVRKRFLCLG WGLPALVAV SVGFTRTKGY KWQAGSERC PWASLLLPSC ACGAVPSPLL</p> <p>LIGIIVFNKL MARDGISDKS KKQAGSERC PWASLLLPSC ACGAVPSPLL SSASARNAMA</p> <p>SLWSSCVVLP LLALTWMSAV LAMTDRRSVL FQALEFVENS AQGFVITAVH CFLRREVQDV</p> <p>VKQMGVCRA DESESDPSC KNGQLQILSD FEKDVDLACQ TVLFEVNTC NPSTITGTLS</p> <p>RLSLDEDEEP KSLCVGPEG LSFSPLPGNI LVPMAASPL GEPPPQEAN PYMCGEGGL</p> <p>RQLDLTWLRP TEPGSEGDM VLPRTLSLQ PGGGGGGGED APRARPEGTP RRAAKTVAH</p> <p>EGYPSFLSVD HSGLGLGPAY GSLQNPYGMT FQPPPTPSA QVPEPERS RTMPRTVPGS</p> <p>TMKMSLERK KLYRSDLDFE VMHTRKRHSE LYHELNQKFE TFDYRSQST AKREKRSVS</p> <p>SGGAERSVC TDKPSGPER SLSQHRRHQ SLSQHSMTLG SLPPKPRERL TLHRAAAWEP</p> <p>TEPDGDFQT EV</p>	Homo sapiens
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345	5521	Brain-Specific Angiogenesis Inhibitor 3	NM_001704	Homo sapiens
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			tgttcaactt tggagaagg agtcatttat ggtcgtatt ctgtaagtga aatgtttcct	
			aaaacttta caaactgcac ttggacgtg gaaatccag atccaaccaa atatagcatt	
			tacctgaat ttcccaaaa ggaccttagc tgcctaaact ttctactcct ggcttatcag	
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			cccaagaag aatttgaat gatggagat catacaatta aaagtcagcg acctgatatct	
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aagcaacgat tcatgttga accgttcat atgttttagt ttccaataa cttcaccatg

NP_001695.1	Brain-Specific Angiogenesis Inhibitor 3	5521	346
MKAVRNLLIY IFSTYLLVMF GFNAAQDFWC STLKVGVIYG SYSVSEMPFK NFTNCTWTLE P			Homo sapiens
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LQYDNFIQI RRVFTNFPF LQKKGEEDQK SFFEFLVLNK VSPSQFGCHV LCTWLESLK			
SENGRTESCG IMYTKTCTPQ HLGEWGIDDO SLILLNNVL PLNEQTEGCL TQELQTTQVC			
NLTREAKRPP KEEFGMMGDH TIKSQRPVS HEKRVPEQA DAAKFMAQTG ESGVEEWSQW			
STCSVTCGQG SQVTRTCVS PYGTHCSGPL RESRVCNNTA LCPVHGWEE WSPWSLCSFT			
CGRGQTRTR SCTPPQYGGP PCEGPETHHK PCNIALCPVD GQWQEWSWS QCSVTCNGT			
QQPSRQCTAA AHGSECRGP WAESRECYNP ECTANGQWNQ WGHWSGCSKS CDGGWERIR			
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TLLDLTQRKN FYAGDLMSV EILRNVTDTF KRASIYPASD GVQFFFIQVS NLLDEENKEK			
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RTAVKNFMAS ELDDNAGLSR SETGSTISMS SLERRKSRY S DLDFEKMVHT RKRHMLLFQE			
LNQKFQTLDR FRDIPNTSSM ENPAPNKNPW DTFKNPSEYP HYTTINVLDT EAKDALELRP			
AEWEKCLNLP LDVQEGDFQT EV			
gagagaccttg cttcatgagc aagctcatct ctggaacaaa ctggcaaacg atctctgtg A			Homo sapiens
gtgttcatca gaacagacac catggcagag catgattacc atgaagacta tgggttcagc			
agtttcaatg acagcagcca ggaggagcat caagacttcc tgcagttcag caaggtcttt			
ctgcccctgca tgtacctggt ggtgtttgtc tgtggtcttg tggggaactc tctggtgctg			
gtcatatcca tcttctacca taagttgcag agcctgacgg atgtgttctt ggtgaaccta			
ccccctggctg acctgggtgt tgtctgcat ctgcccttct gggcctatgc aggcacccat			
gaatgggtgt ttggccaggt catgtgcaag agcctactgg gcatctacac tattaacttc			
tacacgtcca tgcctcatcct cacctgcac actgtggatc gtttcattgt agtgggtaag			
gccaccaagg cctacaacca gcaagccaag aggatgacct ggggcaaggt caccagcttg			
ctcatctggg tgatatccct gctgggtttcc ttgccccaaa ttatctatgg caatgtcttt			
NP_006564	SIV/HIV Receptor BONZO	6031	347

348	6031	SIV/HIV Receptor BON20	NP_006555.1	<p>aatctcgaca agctcatatg tggttaccat gacgaggcaa ttccactgt gttcttgcc accagatga cactggggtt cttcttgcca ctgctacca tgattgtctg ctattcagtc ataatacaaaa cactgcttca tgcgagggc ttccagaagc acagatctct aagatcatc ttcttggtga tggctgtgtt cctgtgacc cagatgacct tcaacctcat gaagttcatc cgcagcacac actgggaata ctatgcatg accagctttc actacacct catggtgaca gaggccatcg cataacctgag ggcctgctt aacctgtgc tctatgctt tgcagcctg aagtttcgaa agaacttctg gaaactgtg aaggacattg gttgcctccc ttacctggg gtctcacatc aatggaaatc ttctgaggac aattccaaga ctttttctgc ctcccacat gtggaggcca ccagcatgtt ccagttatag gccttgccag ggtttcgaga agctgctctg gaatttgcaa gtcattgctg tgcctcttg atgtggtgag gcaggctttg ttatagctt gcgcattctc atggagaagt taccagacac tctggctggt ttggaatgct tcttctcagg catgaacatg tactgttctc ttcttgaaca ctcatgctga aagcccaagt aggggtctc aaatttttaa ggactttcct tctccatct ccaagaatgc tgaacccaag ggggatgaca tgtactcct atgatctcag gttctcctg attgggactg gggctgaagg ttgaagaggt gagcacggcc aacaaagctg ttgatggtag gtggcacact gggcgccaa gctcagaagg ctcttctgac tactgggcaa agagtgtaga tcagagcagc agtgaacaa agtgcaggca ccaccaggca cctcacagaa atgagatcag gctctgctc acctggggc ttgactttg tataggtaga tgttcagatt gcttgatta atccagaata actagcacca gggactatga atgggcaaaa ctgaattata agaggctgat aattccagtg gtccatggaa tgcctgaaaa atgtgcaaaa cagcgtttta gactgtaatt aatctaaaga gcatttctga agtgactct ttggtgctt tgcattttta aatgaaatt ttccaatgtc tgccacacaa acgtatgtaa atgtatatc ccacacacat acacacatat gtcatatatt actagcatat gagttccta gctaagaaat aaaactgtta agtctccaa act</p>	Homo sapiens
349	6204	Lysophosphat idic Acid Receptor Edg4	NM_004720	<p>KLQSLTDVFL VNLPLADLVF VCTLFFWAYA GIHEWVFCQV MCKSLLLGIYT INFYTSMLIL TCITVDRFIV VKATKAYNQ QAKRMTWGV YSVIIKTLH AGGFQKHSRL KIIFLMAVF GYHDEALSTV VLATQMTLGF FLPLLTMIVC YSVIIKTLH AGGFQKHSRL KIIFLMAVF LLTQMPFNLM KFIRSTHWEY YAMTSFHYTI MVTEAIAVLR ACLNPVLYAF VSLFRKNFW KLVKDIGCLP YLGVSHQWKS SEDNSKTFFSA SHNVEATSMF QL</p>	Homo sapiens

350	6204	Lysophosphat NP_004711.2	idic Acid Receptor Edg4	<p>ctggtcaaga ctgttgtcat catcctgggg gcgttcgtgg tctgctggac accaggccag gtgttactgc tcttgatgg tttaggtgtg gactcctgca atgtcctggc ttagaaaaag tacttcttac tgttgccga ggcacactca ctgtcaatg ctgtgtgta ctcttgccga gatgtgaga tgcgcccga cttccgccc ctctctgtc gcgctgctt ccgcccagtc accgagagt ctgtccacta tacatctct gcccaggag gtccagcac tgcgcatcatg cttccgaga acggccacc actgatggac tccaccctt agctacctg aactcagcg gtacgggga agcaacaaat ccacagccc tgatgactg tgggtgctc tggctcaacc caaccaacag gactgactg</p>	Homo sapiens
351	6213	C-C Chemokine Receptor 5	NM_000579	<p>MVINGQCYN ETIGFFYNNK KDVVVVALGL TVSVLVLLTN LLVIAAIASN P RRHQPIYYL LGNLAADLF AGVAYLFME HTGPRFARLS LEGWFLRQGL LDTSLTASVA TLIAIAVERH RSVMAVQLHS RLPRGRVVML IVGVWVAALG LGLLPAHSWH CICALDRCSR MAPLLRSYL AVWALSLLV FLLMVAVYTR IFFYVRRRVQ RMAEHVSCHP RYRETTLSLV KTVVILGAF VVCWTPGQVV LLLDGLGES CNLAVEKYF LLLAEANSLV NAAVYSCRDA EMRTERRLR CCACLRQSTR ESVHYTSSAQ GGASTRIMLP ENGHPLMDST L</p>	Homo sapiens

352	6213	C-C Chemokine Receptor 5	NP_000570.1	MDYQVSSPIY LKSMTDIYLL LITIDRYLAV HFPYSQYQFW MIVYFLEWAP GEKFRNYLLV	gatgaaaaat gacaaactct attgctgatt caacttttta gtcttgctat gtgatttccc ttgtggcctg tattgtggc aggagacaga cttgacggca agaaggttta ccaccaacag gggaaggagg gatgcagagt agagagaatc aaggaggagg gtttgcagag tgacttcata tagatttatg ctaggtgagg caaccacagg tcattcaggg gcctgaaaaa tttaaccgtc agccttaaaa ggggggggcg aaaaaatcgt tttcaaaagg gagactgttt tagtaagtgg actttctcag gggaaatgtc acctctggg tgaaagttac tgaagttac	agcaaccttt cgaaagttcc gtgatctgaa ggcaacatat ggggagaaaa ctccaaggta ggagagctgg aaagacagaa gctggttggg ttgctccgtc ctctgtggcc ccctcaggtc gaggtattcg cagcagaact cctagtcttc aggaggttta cttgaacaca gatttccttc aatacacgag attgattacc cagcatttag atagcactga ctaagatgct aataggcaaa cccacaaaa ccttaggtac ctctccctcc agagagagag tgaatttggg tgagaactac cctctgaata tttccctttg ccaagtcaaa aaattgcttg aaatggcttg	ttatctcccc ttatgtatat cagaaatacc aggttgtaaa tgattagtaa gtttcactga ttaaattgaa gaaacttct gctcactgc aagacatggg taagtcata aaaggagggt agggtgagga taaggatggg gggttgatt aagcagattg ggtcaagaag gtctcaccga ccatcccagc gtatgaggtc tagtagtcat cacatactac gcaaagcatt gcctgcccag tgacacaaag tacaatttac ttattccaga ctttgaaatg ggttgcttaa aaccatcata aaggtgtcag gcattgtggc gtgagagatg catcttagta gacattctga aaagaaaaa tgcatctaata aaaaaacacc ttcta	ttccatgca ttaaagaaa aaaattattt tgtgtttaa agaaatgaca cttagaacca ggaattgag tggaatcatc tggtgtaga aaggctagat gagatcctgg gagatcctgc gagcatttag taagctcaag gtattcgtgc gtattcgtgc gtgagggtca tgaaaagaca ggtgtaaaa gactcctcac aggggtctcc cttcagctca gttgggagga agcatcaaac gtcccatata tgtaggatc tttgaaaata atttcagact aatgggggt agacaaaacca ggtatattca atatgtttg gtacagttaa ataaataaga tgtcagcagg caacagtagc tttgcataat ataagaccct tttgcataat aaaaaacacc ttcta	VILILINCKR P FIFGFVGNML CQLLTGLYFI GFFSGIFFII LPGIIFTRSQ KEGLHYTCSS LLRCRNEKKR HRAVRLIFTI VTETLGMTHC CINPIIYAFV RSTGEQEISV GL	Homo sapiens
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353	6363	Chemokine (C-C motif) Receptor- Like 2 (CCR12)	NM_003965	<p>tctgtctgtg gggaagtggg cacacgttaa aagaaatgtt tatttcagtc ttctgaaata A</p> <p>gggaattact ctggctaaaa tgtagctcca gaaagggaaa gtggggctgt atgaatccag</p> <p>gtccagtttg ttgtttcttc caggataagg cagctgtcgg agggaaaaat catctcccat</p> <p>ttctccacag ggcagtctga agatggccaa ttacacgctg gcaccagagg atgaatatga</p> <p>tgctctcata gaaggtgaac tggagagcga tgaggcagag caatgtgaca agtatgacgc</p> <p>ccaggcactc tcagcccgagc tggtgccatc actctgctct gctgtgttg tgatcggtgt</p> <p>cctggacaat ctctgtgttg tgcttatctt ggtaaaatat aaaggactca aacgcgtgga</p> <p>aaatatctat ctctaaact ttggcagttc taacttgtgt ttcttgctta cctggccctt</p> <p>ctgggtctat gctgggggag atcccatgtg taaaattctc attggactgt acttcgtggg</p> <p>cctgtacagt gagacatttt tcaattgcct tctgactgtg caaaggtacc tagtgttttt</p> <p>gcacaaaggc aactttttct cagccaggag gagggtgccc tgtggcatca ttacaagtgt</p> <p>cctggcatgg gtaacagcca ttctggccac ttgtgctgaa tacgtggttt ataaacctca</p> <p>gatggaagac cagaaataca agtgtgcatt tagcagaact ccttctctgc cagctgatga</p> <p>gacattctgg aagcattttc tgactttaaa aatgaacatt tcggttcttg tcttccccct</p> <p>atattatttt acatttctct atgtgcaaat gagaaaaaca ctaaggttca gggagcagag</p> <p>gtatagcctt ttcaagcttg tttttgccat aatggtagtc ttcttctga tgtgggcgcc</p> <p>ctacaatatt gcatttttcc tgtccacttt caaagaacac ttctccctga gtgactgcaa</p> <p>gagcagctac aatctggaca aaagtgttca catcactaaa ctcatcgcca ccaccactg</p> <p>ctgcatcaac cctctctctg atgcgtttct tgatgggaca tttagcaaat acctctgccg</p> <p>ctgtttccat ctgctgtagta acacccact tcaaccagg gggcagctcg cacaaaggcac</p> <p>atcgagggaa gaacctgacc atccaccga agtgtaaac agcatccacc aatgcaaga</p> <p>agaataaaca tggattttca tctttctgca ttatttcatg taaattttct acacatttgt</p> <p>atacaaaatc ggatacagga agaaaaggga gaggtagct aacatttgtct aagcactgaa</p> <p>tttgtctcag gcacctgca aggtcttcta caaacgtgag ctctctgcc tctaccact</p> <p>tgtccatagt gtggatagga tagtctcat ttctctgaga agaaaactaa ggcgcggaaa</p> <p>tttgtctaag atcacataac taggaagtgg cagaactgat tctccagccc tggtagcatt</p> <p>tgctcagagc ctacgcttgg tccagaacat caaactccaa accctgggga caaacgacat</p> <p>gaaataaatg tatttataaa catct</p>	Homo sapiens
354	6363	Chemokine (C-C motif) Receptor- like 2 (CCR12)	NP_003956.1	<p>LILVKYKGLK RVENIYLNL AVSNLCFLT LPFWAHAGGD PMCKILIGLY FVGLYSETFF</p> <p>NCLLTVQRYL VFLHKGNEFS ARRVPCGII TSVLAWVTAI LATLPEYVVY KPQMEDQKYK</p> <p>CAFSRTPFLP ADETFWKHLV TLKMNISLV LPLFIETFLY VQMRKTLRFR EQRYSLFKLV</p> <p>FAIMVFLIM WAPYNIAFFL STFKEHFSLS DCKSSYNLDK SVHITKLIAT THCCINPLLY</p> <p>AFLDGTFSKY LCRCFHLRSN TPLQPRGQSA QGTSREEPDH STEV</p>	Homo sapiens
355	6446	Pael Receptor (GPR37)	NM_005302	<p>atgcgagccc cgggcgcgct tctgcgccgc atgtcgcggc tactgcttct gctactgctc A</p> <p>aaggtgtctg cctcttctgc cctcggggtc gccctgcgt ccagaaacga aacttgtctg</p> <p>ggggagagct gtgcacctac agtgatccag cgccgcggca gggacgcctg gggacccggga</p> <p>aattctgcaa gagacgttct gcgagcccca gcaaccaggg aggagcaggg ggcagcgttt</p> <p>cttgccggac cctctctgga cctgcccggc gcccccggcc gtgacccggc tgcagggcaga</p> <p>ggggcgagg cgtcggcagc cggaccccg gacactccaa ccaggccacc tggccccctgg</p> <p>aggtggaaa gtgctcgggg tcaggagcct tctgaaactt tggggagagg gaacccacg</p>	Homo sapiens

356	6446	Pael Receptor (GPR37)	NP_005293.1	gcccaccagc tcttctctca gatctcagag gaggaagaga aggggtccca aggcgtggc atttccggc gtagccagga gcagagtgtg aagacagtc cggagccag cgatctttt tactggccaa ggagagccgg gaaactccag ggttccacc acaagccct gtccaaagc gccaatggac tggcggggca cgaaggttg acaattgcac tcccgggccc ggcgctggcc cagaatggat ccttgggtga agaatccat gagcctggg gtcccggcc gggaacagc acgaaccggc gtgtgagact gaagaacccc tctaccgc tgaccaggga gtctatgga gcctacggcg tcatgtgtct gtccgtgtg ccacaactac tacatgcgga gcattccaa ctccctctg gcggtgatgt gcatcgtgtg cttctctgga cttctcatc atcttctct gcttccgct ggtcatctc gccaacctgg ccttctggga gctgtgag gctgtggag gacttctct gcaagatcgt gccctatata cacgagctga ccaagaagt gctgtggag caccacttc acctatgtg ctctgtgat agaccgctc gaggtcgctt ctctgggagt ccaacgtaca gatgtactac gaaatgatc gaaactgttc ctcaacaact cgtgctgcca ccaacgtaca gctgtactac gaaatgatc gaaactgttc ctcaacaact gccaaccttg ctgttatatg ggtggagct ctattgttag cacttccaga agttgtctc cgccagctga gcaaggagga ttgggggtt agtggccgag ctccggcaga aggtgcatt attaagatct ctctgattt accagacacc atctatgtt tagccctcac ctacgacagt gcgagactgt ggtggtattt tggctgttac tttgtttgc ccacgcttt caccatcacc tgctctctag tgactgcgag gaaatccgc aaagcagaga aagcctgtac ccgagggaat aaacggcaga ttcaactaga gactcagatg aactgtacag tagtggcact gaccatttta tatggatttt gcattattcc tgaataatc tgcaacattg ttactgccta catggctaca gggggttcac agcagacaaat ggacctcctt aatatatca gccagtctct tttgttctt aagtcctgtg tcacccagct cctccttttc tgtctctgca aacctttcag tcgggcttc atggagtgt gctgctgtt gctgtgaggaa tgcattcaga agctttcaac ggtgaccagt gatgacaatg acaacgagta caccacggaa ctgcaactct cgcctttcag taccatcgc cgtgaaatgt ccacttttc tctgtcggga actcattgct ga	Homo sapiens
357	6536	Putative Neurotransmi tter Receptor (PNR)	NM_003967	atgagagctg tcttcatcca aggtgctgaa gagcacccct cggtattctg ctaccaggtg A aatgggtctt gcccaggac agtatatact ctgggcaccc agttggtcat ctactgacc tgtgcagcag gcatgctgat tatcgtgcta gggaatgtat ttgtggcatt tgctgtgtcc tacttcaaa cgcttcacac gccaccaac ttctgtctgc tctccctggc cctggctgac atgtttcttg gtctgtgtgt gctgcccctc agcacattc gctcagtga gactgctgg ttcttcgggg acttctctct cgccctgcac acctacctg acacctctt ctgctcacc	Homo sapiens

358	6536	Putative Neurotransmitter Receptor (PNR)	NP_003958.1	<p> tccatcttcc atctctgttt catttcatt gaccgccact gtgccatctg tgacccccctg ctctatccct ccaagttcac agtgagggtg gctctcaggt acatcctggc aggatggggg gtgccgcag catacattc gttattcttc tacacagatg tggtagagac aaggtcagc cagtggctgg aagagatgcc tttgtgggc agttggcagc tgctgtctca taaattttgg ggctgggttaa acttcccttt gttctttgtc ccttgccctca ttatgatcag cttgtatgtg aagatctttg tggttgctac cagacaggct cagcagattc ccacattgag caaaagcctg gctggggctg ccaagcatga gagaaaagct gccaagacct tgggcattgt tgtgggcata tacctcttgt gctggctgcc cttcaccata gacacgatgg tcgacagcct ctttcacttt atcacacccc cactggctct tgacatcttt atctgggttg cttacttcaa ctcagcctgc aaccccatca tctatgtctt ttctaccag tggtttcgga aggcactgaa actcacactg agccagaagg tcttctacc gcagacagc actgttgatt tgtaccaaga atga MRAVFIQGA EHPAFCYQV NGSCPRTVHT LGIQLVIYLT CAAGMLIIVL GNVFAFAVS P YFKALHTPTN FLLLSLALAD MFLGLLVLP STIRSVESCW FFGDFLCRLH TYLDTLFLCT SIFHLCFISI DRHCAICDPL LYPSTFTVRV ALRYILAGWG VPAAYTSFL YTDWETRLS QWLEEMPCVG SCQLLNKFW GWLNFPLFFV PCLIMISLYV KIFVATROA QOITTLKSLS AGAAKHERKA AKTLGIIVGI YLLCWLPTFI DTNVDLSLHF ITPPLVFDIF IWFAYFNSAC NPIIYFSYQ WFRKALKITL SQKVFSPQTR TVDLVQE </p>	Homo sapiens
359	6777	G Protein- Coupled Receptor TM7SF1	NM_003272	<p> cggcgcatg cgcggagacc cccgcggggg cggcgggcgc cgtgagcccc gatgaggccc A gagcgtcccc ggcgcgcggg cagcgcgcgc ggcgcgatgg agacccgcc gtgggaccca gcccgcaacg actcgtgcc gccacgctg acccgcggcc tgcgccctca cgtgaaagctt ggcctcaccg tctctacac cgtgttctac cgtgtgtctc tctgttctat ctacgtgcag ctctggctgg tctgcgtta ccgccacaag cgggtcagct accagagcgt cttctctttt ctctgctct tctggcctc cctgcggacc gtcctcttct cttctactt caaagacttc gtggcgcca attcgtcag cccctctgc tctgtgtgc tctactgctt cctgtgtgc ctgcagttt tcacctcac gctgatgaac ttgtacttca cgcaggtgat ttcaaaagcc aagtcaaaat attctccaga attactcaa taccggtgc cctctacct ggcctccctc ttcatcagcc ttgttttct gtgtgtgaat ttaacctgtg ctgtgctgtt aaagacggga aatgggaga ggaaggttat cgtctctgtg cgagtggcca ttaatgacac gctctctgtg ctgtgtgccg tctctctctc catctgtctc tacaataatc ctaagatgtc cttagccaac attacttgg agtccaaggg ctctccgtg tgtaaatga ctgccatcgg tgtcaccgtg atactgctt acacctctg ggcctgctac aacctgttca tctgtctatt tctcagaac aagagcgtcc attcctttga ttatgactgg tacaatgtat cagaccaggc agatttgaag aatcagctgg gagatgctgg atactatta ttgtgagtgg tgttatttgt ttgggaactc ttacctacca ccttagctgt ttattcttc cgagttagaa atctacaaa ggaccttacc aacctggaa tgggtcccg ccattggattc agtccagat cttatttctt tgacaacctt cgaagatatg acagtgatga tgaccttgc ttgaacattg cccctcaggc acttcaggga ggttttgctc cagattacta tgattgggga caacaaacta acagcttctt ggcacaagca ggaactttgc aagactcaac ttgtgatcct gacaaaccaa gccttgggta gcatcagtta acagttttat ggacgattcc tcagatgaaa agcttcagaa aagcttagtg acagctgaat ttttagggca ctttctctta agaaatagaa cttgattttt attgtttaca ggtttccaat ggcccatag gaataagcaa taatgtagac tgataaaccc ttattttagt actaaagagg </p>	Homo sapiens

360	6777	G Protein- Coupled Receptor TM7SF1	NP_003263.1	MRPERPRRG SAPGPMETPP WDPRNDSL PTLTPAVPPY VKLGLTVVYT VFYALLFVFI P YVQLWLVLRY RHKRLSYQSV FLFLCLFWAS LRTVLFSEYF KDFVAANSLS PFVFWLLYCF PVCLOFFTILT LMNLYFTQVI FKAKSKYSPE LLKYRLPLYL ASLFISLVFL LVNLTCALV KTGNWERKVI VSVRVAINDT LFVLCVLSLS ICYKISKMS LANIYLESKG SSVQVTAIG VTVILLYTSR ACYNLFILSF SQNKSVMHSD YDWNVNSDQA DLKNQLGDAG YVLFGVVLFV WELLPTLIW YFFVRNPTK DLTPNGMVP HSFSRPSYFF DNPRRYDSDD DLAWNIAPOG LQGGFAPDYY DWGQQTNSFL AQAGTLQDST LDPDKPSLG	gagccttgct attcagtggt gtataattta aactttttta agaaaaatctg tacttttata aagatgtatt ttgtataact taaataataa tgctaaaagta tactagggtt tttttttctt gagaatgtta ctgcaatcat gtgtagttt gcacagactt ttatgcataa ttcactttta aaatatagaa tatatggtct aatagttttt taaagctttt ggactaaagt attccacaaa tcttacctct ttaggtcact gatggtcact ccgattctga gtccacatt ggtagactcc taaaatacag ttgacaaact agccaaatgc aactccagtg ttgataatta aatgaaatg gtaaaagcagc agactgtaag gtcttttagag attttttttt aaggttcagg ccgtagggtc ctcaaggaaat ctcttaagtt ttgcccagaag actggtactt cctttcagta gggcgcta gtataacat taatgataag ttgataacat taaaaatgta gctgacttat cctattaaac ctcctctgct atgttcac	Homo sapiens
361	6853	Purinergic Receptor P2Y11	NM_002566	atggatcgag gtgccaagtc ctgccctgcc aacttcttgg cagctgccga cgacaaactc A agtgggttcc agggggactt cctgtggccc atactgttgg ttgagttcct ggtggccgtg gccagcaatg gcctggccct gtaccgcttc agcatccgga agcagcggc atggcacccc gcctgggtct tctctgtcca gctggcagtc agcagactgc tctgcgtct gacgtgccc ccgtggccg cctacctcta tcccccaag cactggcgt atggggaggc cgggtggccg ctggagcgct tctcttcac ctgcaacctg ctggcgagcg tcacttctat cactgcatc agcctcaacc gctacctggg catcgtgcac ccttctctcg cccgaagcca cctgcgaccc aagcacgctt gggcctgtgag cgtgcggcg cgtgccttgg cggccttggc ggccatggcc acactcagct tctccacct gaagaggcgg cagcaggggg cgggcaactg cagcgtggcc aggcccgagg cctgcataca gtgtctgggg acagcagacc acgggctggc ggcctacaga gcgtatagcc tgggtctggc ggggttgggc tgcggcctgc cgtgtctgt cactgtggca gcctacggcg cctcggcg ggcctgtgta cgcagcccg gcatgactgt ggcgagaag ctgcgtgtgg cagcgttggg ggcagtggt gtggcctct acgccagctc ctatgtggcc taccacatca tgcgggtgct caactggat gctcggcggc gctggagcac ccgtgccc agctttgcag acatagccca ggcacagca gccctggagc tggggcccta cgtgggtac caggtgatgc gggccctcat gccctggcc tctgtgtcc acccttact ctacatggcc gcagtggcca gcctggctg ctgctgcga cactggccc gctacagga cagctggaa ccagaggacg ccaagagcac tggccaagcc ctggccctca atgccacagc cggccctaaa ccgtcagagc cccagtcggc tgagctgagc caatga	atggatcgag gtgccaagtc ctgccctgcc aacttcttgg cagctgccga cgacaaactc A agtgggttcc agggggactt cctgtggccc atactgttgg ttgagttcct ggtggccgtg gccagcaatg gcctggccct gtaccgcttc agcatccgga agcagcggc atggcacccc gcctgggtct tctctgtcca gctggcagtc agcagactgc tctgcgtct gacgtgccc ccgtggccg cctacctcta tcccccaag cactggcgt atggggaggc cgggtggccg ctggagcgct tctcttcac ctgcaacctg ctggcgagcg tcacttctat cactgcatc agcctcaacc gctacctggg catcgtgcac ccttctctcg cccgaagcca cctgcgaccc aagcacgctt gggcctgtgag cgtgcggcg cgtgccttgg cggccttggc ggccatggcc acactcagct tctccacct gaagaggcgg cagcaggggg cgggcaactg cagcgtggcc aggcccgagg cctgcataca gtgtctgggg acagcagacc acgggctggc ggcctacaga gcgtatagcc tgggtctggc ggggttgggc tgcggcctgc cgtgtctgt cactgtggca gcctacggcg cctcggcg ggcctgtgta cgcagcccg gcatgactgt ggcgagaag ctgcgtgtgg cagcgttggg ggcagtggt gtggcctct acgccagctc ctatgtggcc taccacatca tgcgggtgct caactggat gctcggcggc gctggagcac ccgtgccc agctttgcag acatagccca ggcacagca gccctggagc tggggcccta cgtgggtac caggtgatgc gggccctcat gccctggcc tctgtgtcc acccttact ctacatggcc gcagtggcca gcctggctg ctgctgcga cactggccc gctacagga cagctggaa ccagaggacg ccaagagcac tggccaagcc ctggccctca atgccacagc cggccctaaa ccgtcagagc cccagtcggc tgagctgagc caatga	Homo sapiens
362	6853	Purinergic Receptor P2Y11	NP_002557.1	MDRGAKSCPA NFLAADDKIL SGFGDFLWP ILVVEFLVAV ASNGLALYRF SIRQRPWHP P AVVFSVQLAV SDLLCALITP PLAAALYPPK HWRYGEAAR LERFLTNCNL LGSVIFITCI SINRYLGIVH PFFARSHLRP KHAWAVSAAG WFLAALLAMP TLFSEHLKRP QQGAGNCSVA RPEACIKCLG TADHGLAAYR AYSLVLGLG CGLPLLLTLA AYGALGRAVL RSPGMTVAEK LRVAALVASG VALYASSYVP YHIMRVLNVD ARRWSTRCP SFADIAQATA ALELGPYVGY	gagccttgct attcagtggt gtataattta aactttttta agaaaaatctg tacttttata aagatgtatt ttgtataact taaataataa tgctaaaagta tactagggtt tttttttctt gagaatgtta ctgcaatcat gtgtagttt gcacagactt ttatgcataa ttcactttta aaatatagaa tatatggtct aatagttttt taaagctttt ggactaaagt attccacaaa tcttacctct ttaggtcact gatggtcact ccgattctga gtccacatt ggtagactcc taaaatacag ttgacaaact agccaaatgc aactccagtg ttgataatta aatgaaatg gtaaaagcagc agactgtaag gtcttttagag attttttttt aaggttcagg ccgtagggtc ctcaaggaaat ctcttaagtt ttgcccagaag actggtactt cctttcagta gggcgcta gtataacat taatgataag ttgataacat taaaaatgta gctgacttat cctattaaac ctcctctgct atgttcac	Homo sapiens

363	6921	G Protein-Coupled Receptor GPR39	NM_001508	QVMRGLMPLA FCVHPLLYMA AVPSLGCCCR HCPGYRDSWN PEDAKSTGQA LPLNATAAPK PSEFQSRELS Q	atggcttcac ccagcctccc gggcagtgac tgctccaaa tcattgatca cagtcagtgc A cccgagtttg aggtggccac ctggatcaaa atcacctta ttctggtgta cctgatcatc ttcgtgatgg gccttctggg gaacagcgcc accattcggg tcaccagggt gctgcagaag aaaggatact tgcagaagga ggtgacagac cacatggtga gtttggcttg ctcggacatc ttggtgttcc tcatcggcac gcccatggag ttctacagca tcacttgaa tccctgacc acgtccagct acacccctgc ctgcaagctg cacactttcc tcttcgaggc ctgcagctac gttacgctgc tgcacgtgct gacactcagc tttagcgct acatcgccat ctgtcacccc ttcagggtaca agctgtgctc gggaccttgc cagtgaaagc tgctgattgg ctctgcttgg gtcacctccg ccttggtggc actgcccctg ctgtttgcca tgggtactga gtacccccg gtgaacgtgc ccagccaccg ggtctcact tgcaaccgct ccagcacccg ccaccacgag cagcccgaga cctccaatat gtccatctgt accaacctct ccagccgctg gaccgtgttc cagtcacagca tcttcggcgc cttcgtggtc tacctcgtgg tctgctctc cgtagccttc atgtgctgga acatgatgca ggtgctcatg aaaagccaga agggctcgtc ggcggggggc acgcggcctc cgcagctgag gaagtcgag agcgaagaga gcaggaccgc caggaggcag accatcatct tcctgaggtc gattgtgtg acattggcg tatgctggat gcccaaccag attcggagga tcattggtgc ggccaaacc aagcacgact ggacgaggtc ctacttcgg gcgtacatga tctctctccc cttctcggag acgtttttct acctcagctc ggtcataaac ccgctcctgt acacggtgct ctcgcagcag ttctcggcggg tgttcgtgca ggtcgtgtgc tgccgctgt cgtgcagca cgccaaacc gagaaagcgc tgcgcgtaca tgcgcactcc accaaccgaca gcgccgctt tgtgcagcgc ccgttgcctc tgcgctccc gcgccagtcc tctgcaagga gaactgagaa gattttctta agcacttttc agagcgaggc cgagccccag tctaagtccc agtcattgag tctcagatca ctagagccca actcagggcg gaaaccagcc aatctcgtc cagagaatgg ttttcaggag catgaagttt ga MASPSLPGSD CSQIIDHSHV PEFEVATWIK ITLILVYLII FVMGLLGNSA TIRVTQVLQK P KGYLQKEVTD HMVSLACSDI LVFLIGMPME FYSIWNPLT TSSYTLSCKL HTFLFEACSY ATLLHVLTL FERYIAICHP FRYKAVSGPC QVKLLIGFVW VTSALVALPL LFAMGTEYPL VNVPSHRGLT CNRSSTRHHE QPETSNSMIC TNLSSRWTFV QSSIFGAFV YLVVLLSVAF MCWNMMQVLM KSQKSLAGG TRPPQLRKSE SEESRTARRQ TIIFRLIIV TLAVCMWPNQ IRIMAAAKP KHDWTRSYFR AYMILLPFE TFFYLSSVIN PLYTVSSQQ FRRVFQVLC CRLSLQHANH EKRLRVHAHS TTDSARFVQR PLLEFASRRQS SARRTEKIFL STFQSEABPQ SKSQSLLES LEPNSGAKPA NSAAENGFEQ HEV ggacaggtgc cccgggagct tcccgctcgc gaagaccag acggctgcag gagccccggc A agcctcgggg tcagcggcac catgaacgtc tcgggctgcc cagggggccg gaacgcgagc cagggcggcg gcgggggagg ctggcacccc gagcggtca tcgtgcccc gctcttcgcg ctcatcttcc tcgtgggcac cgtgggcaac acgctggtgc tggcggtgct gctgcggcg ggccaggcgg tcagcactac caacctgttc atccttaacc tggcggtggc cgacctgtgt ttcatcctgt gctgcgtgcc ctccaggcc accatctaca ccctggacgg ctgggtgttc ggctcgtgc tgtgcaaggc ggtgcacttc ctcatcttcc tcaccatgca cgcacgagc ttcacgctgg ccgcgctctc cctggacagg tatctggcca tccgctacc gctgcactcc	Homo sapiens
364	6921	G Protein-Coupled Receptor GPR39	NP_001499.1	atggcttcac ccagcctccc gggcagtgac tgctccaaa tcattgatca cagtcagtgc A cccgagtttg aggtggccac ctggatcaaa atcacctta ttctggtgta cctgatcatc ttcgtgatgg gccttctggg gaacagcgcc accattcggg tcaccagggt gctgcagaag aaaggatact tgcagaagga ggtgacagac cacatggtga gtttggcttg ctcggacatc ttggtgttcc tcatcggcac gcccatggag ttctacagca tcacttgaa tccctgacc acgtccagct acacccctgc ctgcaagctg cacactttcc tcttcgaggc ctgcagctac gttacgctgc tgcacgtgct gacactcagc tttagcgct acatcgccat ctgtcacccc ttcagggtaca agctgtgctc gggaccttgc cagtgaaagc tgctgattgg ctctgcttgg gtcacctccg ccttggtggc actgcccctg ctgtttgcca tgggtactga gtacccccg gtgaacgtgc ccagccaccg ggtctcact tgcaaccgct ccagcacccg ccaccacgag cagcccgaga cctccaatat gtccatctgt accaacctct ccagccgctg gaccgtgttc cagtcacagca tcttcggcgc cttcgtggtc tacctcgtgg tctgctctc cgtagccttc atgtgctgga acatgatgca ggtgctcatg aaaagccaga agggctcgtc ggcggggggc acgcggcctc cgcagctgag gaagtcgag agcgaagaga gcaggaccgc caggaggcag accatcatct tcctgaggtc gattgtgtg acattggcg tatgctggat gcccaaccag attcggagga tcattggtgc ggccaaacc aagcacgact ggacgaggtc ctacttcgg gcgtacatga tctctctccc cttctcggag acgtttttct acctcagctc ggtcataaac ccgctcctgt acacggtgct ctcgcagcag ttctcggcggg tgttcgtgca ggtcgtgtgc tgccgctgt cgtgcagca cgccaaacc gagaaagcgc tgcgcgtaca tgcgcactcc accaaccgaca gcgccgctt tgtgcagcgc ccgttgcctc tgcgctccc gcgccagtcc tctgcaagga gaactgagaa gattttctta agcacttttc agagcgaggc cgagccccag tctaagtccc agtcattgag tctcagatca ctagagccca actcagggcg gaaaccagcc aatctcgtc cagagaatgg ttttcaggag catgaagttt ga MASPSLPGSD CSQIIDHSHV PEFEVATWIK ITLILVYLII FVMGLLGNSA TIRVTQVLQK P KGYLQKEVTD HMVSLACSDI LVFLIGMPME FYSIWNPLT TSSYTLSCKL HTFLFEACSY ATLLHVLTL FERYIAICHP FRYKAVSGPC QVKLLIGFVW VTSALVALPL LFAMGTEYPL VNVPSHRGLT CNRSSTRHHE QPETSNSMIC TNLSSRWTFV QSSIFGAFV YLVVLLSVAF MCWNMMQVLM KSQKSLAGG TRPPQLRKSE SEESRTARRQ TIIFRLIIV TLAVCMWPNQ IRIMAAAKP KHDWTRSYFR AYMILLPFE TFFYLSSVIN PLYTVSSQQ FRRVFQVLC CRLSLQHANH EKRLRVHAHS TTDSARFVQR PLLEFASRRQS SARRTEKIFL STFQSEABPQ SKSQSLLES LEPNSGAKPA NSAAENGFEQ HEV ggacaggtgc cccgggagct tcccgctcgc gaagaccag acggctgcag gagccccggc A agcctcgggg tcagcggcac catgaacgtc tcgggctgcc cagggggccg gaacgcgagc cagggcggcg gcgggggagg ctggcacccc gagcggtca tcgtgcccc gctcttcgcg ctcatcttcc tcgtgggcac cgtgggcaac acgctggtgc tggcggtgct gctgcggcg ggccaggcgg tcagcactac caacctgttc atccttaacc tggcggtggc cgacctgtgt ttcatcctgt gctgcgtgcc ctccaggcc accatctaca ccctggacgg ctgggtgttc ggctcgtgc tgtgcaaggc ggtgcacttc ctcatcttcc tcaccatgca cgcacgagc ttcacgctgg ccgcgctctc cctggacagg tatctggcca tccgctacc gctgcactcc	Homo sapiens	
365	7221	Galanin Receptor GalR2	NM_003857	atggcttcac ccagcctccc gggcagtgac tgctccaaa tcattgatca cagtcagtgc A cccgagtttg aggtggccac ctggatcaaa atcacctta ttctggtgta cctgatcatc ttcgtgatgg gccttctggg gaacagcgcc accattcggg tcaccagggt gctgcagaag aaaggatact tgcagaagga ggtgacagac cacatggtga gtttggcttg ctcggacatc ttggtgttcc tcatcggcac gcccatggag ttctacagca tcacttgaa tccctgacc acgtccagct acacccctgc ctgcaagctg cacactttcc tcttcgaggc ctgcagctac gttacgctgc tgcacgtgct gacactcagc tttagcgct acatcgccat ctgtcacccc ttcagggtaca agctgtgctc gggaccttgc cagtgaaagc tgctgattgg ctctgcttgg gtcacctccg ccttggtggc actgcccctg ctgtttgcca tgggtactga gtacccccg gtgaacgtgc ccagccaccg ggtctcact tgcaaccgct ccagcacccg ccaccacgag cagcccgaga cctccaatat gtccatctgt accaacctct ccagccgctg gaccgtgttc cagtcacagca tcttcggcgc cttcgtggtc tacctcgtgg tctgctctc cgtagccttc atgtgctgga acatgatgca ggtgctcatg aaaagccaga agggctcgtc ggcggggggc acgcggcctc cgcagctgag gaagtcgag agcgaagaga gcaggaccgc caggaggcag accatcatct tcctgaggtc gattgtgtg acattggcg tatgctggat gcccaaccag attcggagga tcattggtgc ggccaaacc aagcacgact ggacgaggtc ctacttcgg gcgtacatga tctctctccc cttctcggag acgtttttct acctcagctc ggtcataaac ccgctcctgt acacggtgct ctcgcagcag ttctcggcggg tgttcgtgca ggtcgtgtgc tgccgctgt cgtgcagca cgccaaacc gagaaagcgc tgcgcgtaca tgcgcactcc accaaccgaca gcgccgctt tgtgcagcgc ccgttgcctc tgcgctccc gcgccagtcc tctgcaagga gaactgagaa gattttctta agcacttttc agagcgaggc cgagccccag tctaagtccc agtcattgag tctcagatca ctagagccca actcagggcg gaaaccagcc aatctcgtc cagagaatgg ttttcaggag catgaagttt ga MASPSLPGSD CSQIIDHSHV PEFEVATWIK ITLILVYLII FVMGLLGNSA TIRVTQVLQK P KGYLQKEVTD HMVSLACSDI LVFLIGMPME FYSIWNPLT TSSYTLSCKL HTFLFEACSY ATLLHVLTL FERYIAICHP FRYKAVSGPC QVKLLIGFVW VTSALVALPL LFAMGTEYPL VNVPSHRGLT CNRSSTRHHE QPETSNSMIC TNLSSRWTFV QSSIFGAFV YLVVLLSVAF MCWNMMQVLM KSQKSLAGG TRPPQLRKSE SEESRTARRQ TIIFRLIIV TLAVCMWPNQ IRIMAAAKP KHDWTRSYFR AYMILLPFE TFFYLSSVIN PLYTVSSQQ FRRVFQVLC CRLSLQHANH EKRLRVHAHS TTDSARFVQR PLLEFASRRQS SARRTEKIFL STFQSEABPQ SKSQSLLES LEPNSGAKPA NSAAENGFEQ HEV ggacaggtgc cccgggagct tcccgctcgc gaagaccag acggctgcag gagccccggc A agcctcgggg tcagcggcac catgaacgtc tcgggctgcc cagggggccg gaacgcgagc cagggcggcg gcgggggagg ctggcacccc gagcggtca tcgtgcccc gctcttcgcg ctcatcttcc tcgtgggcac cgtgggcaac acgctggtgc tggcggtgct gctgcggcg ggccaggcgg tcagcactac caacctgttc atccttaacc tggcggtggc cgacctgtgt ttcatcctgt gctgcgtgcc ctccaggcc accatctaca ccctggacgg ctgggtgttc ggctcgtgc tgtgcaaggc ggtgcacttc ctcatcttcc tcaccatgca cgcacgagc ttcacgctgg ccgcgctctc cctggacagg tatctggcca tccgctacc gctgcactcc	Homo sapiens	

366	7221	Galanin Receptor GalR2	NP_003848.1	<p>cgagagctgc gcacgcctcg aaacgcgctg gcagccatcg ggctcatctg ggggctgtcg ctgtcttctt ccggggcccta cctgagctac taccgccagt cgcagctggc caactcgacc gtgtgccatc ccgcgtggag cgcctctgc cgcgcgcga tggacatctg caacttcgtc ttcagtaacc tgcctctctg gctgggtctc ggccctgacct acgcgcgcac cttgcgctac ctctggcgcg ccgtcgaccc ggtggccgcg ggtcggggtg cccggcgcg ccaagcgcaag gtgacacgca tgatcctcat cgtggccgcg ctcttctgccc tctgtctggat gcccacccac gcgtcatcc tctgcgtgtg gttcgccag ttcccgctca cgcgcgcac ttatgcgctt cgcatcctct cgcacctggt ctctacgccc aactcctgog tcaaccccat cgtttacgcg ctggtctcca agcacttccg caaaggcttc cgcacgatct gcgcgggccc gctgggcccgt gccccaggcc gagcctcggg ccgtgtgtgc gctgcgcgc ggggcaccca cagtggcagc gtgttgagc gcgagtcacg cgacctgttg cacatgagcg aggcggcggg ggccttctgt ccctgccccg gcgcttccca gccatgcac ctcgagccct gtcctggccc gtcctggcag ggcccaagg caggcgacag catcctgacg gttgatgtgg cctgaaagca cttagcgggc gcgctgggat gtcacagagt tggagtcatt gttgggggac cgtgggcccg</p>	<p>Homosapiens</p>
367	7246	Orexin Receptor 1	NM_001525	<p>ctcctcttca ggaagttaga ggctgagacc cgaaaagacc tgggtgcaag cctccaggca A ccctgaaggg agtgggctga gggctggccc aagctccctc ctctccctct gttagagccta ggatgcccc ctgtcgcagc ggctcctgag ctcatggagc cctcagccac ccagggggcc cagatggggg tcccccttg cagcagagag ccgtcccttg tgcctccaga ctatgaagat gagtttctcc gctatctgtg gcgtgattat ctgtaccaca aacagtatga gtggtcctc atcgagcct atgtggctgt gttcgtcgtg gccctgggtg gcaacacgct ggtctgcctg gccgtgtggc ggaaccacca catgaggaca gtcaccaact acttcattgt caacctgtcc ctggctgacg ttctggtagc tgctatctgc ctgcgggcca gcctgctggt ggacatcact gagtcctggc tgttcggcca tgcctctgc aaggtcatcc cctatctaca ggtgtgtcc gtgtcagtg cagtgtctaac tctcagcttc atcgcccttg accgtggtg tgcctatctg caccactat tgttcaagag cacagccccg cgggcccgtg gctccatctt gggcatctgg gctgtgtgc tggccatcat ggtgccccag gctgagtcga tggaaatgac cagtgtgctg cctgagctag ccaaccgcac acggtctctt tcagttctgt atgaacgctg ggcagatgac ctctatccca agatctacca cagttgcttc tttatgtca cctacctggc cccactgggc ctcatggcca tggcctattt ccagatattc cgcaagctct ggggcggcca gatccccggc accacctcag cactggtgcg gaactggaag cgccccctcag accagctggg ggacctggag caggggcctga gtggagagcc ccagccccgg ggcgcgcct tcctggctga agtgaagcag atgcgtgcac ggagggaagac agccaagatg ctgatgttgg tgctgctggt cttcgccctc tgctacctgc ccatcagcgt cctcaatgtc cttaaagagg tgttcgggat gttccgcca gccagtgacc gcgaagctgt ctacgcctgc ttcaccttct cccactggct ggtgtacgcc</p>	<p>Homosapiens</p>

368	7246	Orexin Receptor 1	NP_001516.1	MEPSATPGAQ MGVPVPSREP SPVPDYEDE FLRYLWRDYL YPKQYEWVLI AAYVAVFVVA P LVGNTLVCLA VWRNHMRTV TNYFIVNLSL ADVLVTAIL PASLLVDITE SWLFHALCK VIPYLAQVSV SVAVLTLSFI ALDRWYAICH PLLEFKSTARR ARGSIILGIWA VSLAIMVPOA AVMECSSVLP ELANRTRLES VCDERWADDL YPKIYHSCFF IVTYLAPLGL MAMAYFQIFR KLWGRQIPGT TSALVRNWKR PSDQLGDLEQ GLSGEPQPRG RAFLAEVKQM RARRKTAKML MVLVLFALC YLPISVLNVL KRVFGMFRQA SDREAVYACF TFSHWLVYAN SAANPIIYNF LSGKFRQEFK AAFSCCLPGL GPCGSLKAPS PRSSASHKSL SLQSRCSISK ISEHVVLTSV TTVLP	Homo sapiens
369	7247	Orexin Receptor 2	NM_001526	gggggggggg taattgagct tcaagttagc cggacgtagc tttctctctcc tgggtgtcatt A gtgcagcct ccagtgccgg gtccctagtt cctcagctgc ctatcttccc ggtgcaacat cgctgtaaa gacagcaag ccacgcaga agttgcccgg cagaagactc cggaggcatt ggctcagtaa cttttcacgt cttttctgc tcgggagccc cttctagcct ctccgcgcag cctttccac cgcaaatcac cagtgtcat ggggcaggcg gagaggagct tgcagcattg agcggaaccg gacttgagcc cgtgatgtcc ggcaccaaat tggaggactc cccccctgt cgcaactggt catctgcttc ggagctgaat gaaactcaag agcccttttt aaacccacc gactatgacg acgaggaatt cctgcggtac ctgtggagg aatacctgca ccgaaaagaa tatgagtggg tcctgatcgc cgggtacatc atcgtgttcg tcgtggctct cattgggaac gtcctggttt gtgtggcagt gtggaagaac caccacatga ggacggtaac caactactc atagtcaatc tttctctggc tgatgtgctc gtgaccatca cctgccttcc agccacactg gtcgtggata tcactgagac ctggtttttt ggacagtccc tttgcaaat gattccttat ctacagaccg tgtcgggtgc tgtgtctgtc ctacacatga gctgtatcgc ctgggatcgg tggtatgcaa tctgtcacc tttgatgttt aagagcacag caaagcgggc ccgtaacagc attgtcatca tctggattgt ctcctgcatt ataattgatt ctcagggccat cgtcatggag tgacgaccg tgttcccagg cttagccaat aaacaccac tctttacggt gtgtgatgag cgctggggtg gtgaaattta tcccaagatg taccacatct gtttctttct ggtgacatac atggcaccac tgtgtctcat ggtgttggct tatctgcaa tatctgcaa actctggtgt cgacagatcc ctggaacatc atctgtagtt cagagaaaaa ggaagccccct gcagcctggt tcacagcttc gagggccagg acagccaacg aagtcgccga agtcgctgtt ggcgctgaa ataaagcaga tccgagccag aagaaaaa ccccggtatg tgatggttgt gcttttggtg tttgcaattt gctatctacc aattagcatc ctcaatgtgc taaagagagt atttgggatg tttgcccata ctgaagacag agagactgtg tatgcctgtt ttacctttt acactggctt gtatatgcca atagtctgc gaatccaatt attataatt ttctcagtgg aaaatttga gaggaaattta aagctgcgtt ttctgtctgt tgccttggag ttcaccatcg ccaggaggat cggtcacca ggggacgaac tagcacagag agcgggaagt ccttgaccac tcaaatcagc	Homo sapiens

370	7247	Orexin Receptor 2	NP_001517.1	<p>aactttgata acatatcaaa actttctgag caagttgtgc tcaactagcat aagcacactc ccagcagcca atggagcagg accacttcaa aactgttaga atatttattc atatgacaag gatacctgag taaaactatc ctttttaaaa tcaactgggaa cagaaatttt attatcctat gatgtgaagc taaaattact tgtggatctt tttttttttt aatctattgc tctttggaaa taaaaaaaa gtcagtttaa aatgaaaaaa aaaaaaaa aaa</p> <p>MSGTKLEDSP PCRNWSSASE LNETQEPFLN PTDYDDEEFL RYLWREYLHP KEYEWVLIAG P YIIVFVALI GNVLCVAVW KNHMRVTVN YFIVNLSLAD VLVTITCLPA TLVVDITETW FFGQSLCKVI PYLQIVSVSV SVLTLSLAL DRWYAICHL MEKSTAKRAR NSIVIIWIVS CIIMIPQAI MECSTVFPGL ANKTTLETV DERWGEIYP KMYHICFFLV TYMAPLCLMV LAYLIQIFRL WCRQIPGTSS VVQRKWKPLQ PVSQPRGPQ PTKSRMSAVA AEIKQIRARR KTARMIMVVL LVFAICYLPI SILNVLKRVF GNEAHTEDRE TVYAWFTFSH WLVIYANSAAN PIIYNFLSGK FREEFKAAFS CCCLGVHHRQ EDRLTRGRTS TESRKSLLTQ ISNFDNISKL SEQVLTIS TLPAANGAGP LQNW</p>	Homo sapiens
371	8436	Platelet- Activating Factor Receptor	NM_000952	<p>ccagctgata ttccagccca cagcaatgga gccacatgac tctcccaca tggactctga A gttccgatac actctcttcc cgattgttta cagcatcacc tttgtgtcgc ggtcattgc taatggctac gtgctgtggg tctttgcccgc cctgtaccct tgcaagaaat tcaatgagat aaagatcttc atggtgaacc tcaccatggc ggacatgctc tctttgatca cctgtccact ttggattgtc tactaccaaa accaggggcaa ctggatactc cccaaattcc tgtgcaacgt ggctggctgc cttttcttca tcaacaccta ctgctctgtg gccttccctgg gcgtcatcac ttataaccgc ttccaggcag taactcggcc catcaagact gctcaggcca acaccggcaa gcgtggcatc tctttgtcct tggtcactgc ggtggccatt gtgggagctg catcctactt cctcatcctg gactctacca acacagtgc cgacagtgcg ggctcaggca acgtcactgc ctgctttgag cattaagaga agggcagcgt gccagtcctc atcatccaca tcttcatcgt gttcagcttc tctctggtct tctcatcat cctctctgc aacctggtca tcatccgtac cttgctcatg cagccggtgc agcagcagcg caacgtgaa gtcaagcgcc gggcgctgtg gatgggtgc acggtcttgg cgggtgttcat catctgcttc gtgcccacc acgtggtgca gctgccctgg accttgcgtg agctgggctt ccaggacagc aaattccacc aggccattaa tgatgcacat caggtcacc cctgctcctc tagcaccaac tgtgtcttag accctgttat ctactgttc ctcaccaaga agttccgcaa gcacctcacc gaaaagtctt acagcatgcg cagtagccgg aaatgctccc gggccaccac ggatacggtc actgaagtgg ttgtgccatt caaccagatc cctggcaatt cctcaaaaa ttagtctctg cttc</p> <p>MEPHDSSHMD SEFRYTLFPI VYSIIFVLGV IANGVILWVF ARLYPCKKEN EIKIFMVNLT P MADMLFLITL PLWIVYYQNQ GNWILPKFLC NVAGCLFFIN TYCSVAFILGV ITYNRFQAVT RPIKTAQANT RKRGISLSLV IWVAIVGAAS YFLILDSTNT VPDSAGSGNV TRCFEHEYEG SVPVLIHIF IVFSFFLVFL IILFCNLVII RTLLMQPVQ QRNAEVKRRRA LWMVCTVLAV FIICFVPHV VQLPWTIAEL GFQDSKFHQA INDAHQVTLIC LLSTNCVLDL VIYCFITKKE RKHLTEKFYS MRSSRKCRA TTDVTVEVV PFNIQIPGNSL KN</p>	Homo sapiens
372	8436	Platelet- Activating Factor Receptor	NP_000943.1	<p>ccagctgata ttccagccca cagcaatgga gccacatgac tctcccaca tggactctga A gttccgatac actctcttcc cgattgttta cagcatcacc tttgtgtcgc ggtcattgc taatggctac gtgctgtggg tctttgcccgc cctgtaccct tgcaagaaat tcaatgagat aaagatcttc atggtgaacc tcaccatggc ggacatgctc tctttgatca cctgtccact ttggattgtc tactaccaaa accaggggcaa ctggatactc cccaaattcc tgtgcaacgt ggctggctgc cttttcttca tcaacaccta ctgctctgtg gccttccctgg gcgtcatcac ttataaccgc ttccaggcag taactcggcc catcaagact gctcaggcca acaccggcaa gcgtggcatc tctttgtcct tggtcactgc ggtggccatt gtgggagctg catcctactt cctcatcctg gactctacca acacagtgc cgacagtgcg ggctcaggca acgtcactgc ctgctttgag cattaagaga agggcagcgt gccagtcctc atcatccaca tcttcatcgt gttcagcttc tctctggtct tctcatcat cctctctgc aacctggtca tcatccgtac cttgctcatg cagccggtgc agcagcagcg caacgtgaa gtcaagcgcc gggcgctgtg gatgggtgc acggtcttgg cgggtgttcat catctgcttc gtgcccacc acgtggtgca gctgccctgg accttgcgtg agctgggctt ccaggacagc aaattccacc aggccattaa tgatgcacat caggtcacc cctgctcctc tagcaccaac tgtgtcttag accctgttat ctactgttc ctcaccaaga agttccgcaa gcacctcacc gaaaagtctt acagcatgcg cagtagccgg aaatgctccc gggccaccac ggatacggtc actgaagtgg ttgtgccatt caaccagatc cctggcaatt cctcaaaaa ttagtctctg cttc</p> <p>MEPHDSSHMD SEFRYTLFPI VYSIIFVLGV IANGVILWVF ARLYPCKKEN EIKIFMVNLT P MADMLFLITL PLWIVYYQNQ GNWILPKFLC NVAGCLFFIN TYCSVAFILGV ITYNRFQAVT RPIKTAQANT RKRGISLSLV IWVAIVGAAS YFLILDSTNT VPDSAGSGNV TRCFEHEYEG SVPVLIHIF IVFSFFLVFL IILFCNLVII RTLLMQPVQ QRNAEVKRRRA LWMVCTVLAV FIICFVPHV VQLPWTIAEL GFQDSKFHQA INDAHQVTLIC LLSTNCVLDL VIYCFITKKE RKHLTEKFYS MRSSRKCRA TTDVTVEVV PFNIQIPGNSL KN</p>	Homo sapiens
373	8509	G Protein- Coupled Receptor Ls8509	NM_007223	<p>tggggcgctc ctccttcgtc cccgcccgcg tgtcaagctg tgttctagcg gccgaggac A cgaggggggc taagaaaggg ggcgcccagc catgcagagc caaaaggcg ctgcgggaacg gggtccccgt cgccagtgcg gaggcaggag gtcggagcca caagtggagg gctgggaagc aggaccagc acgggcgtct tggcaggcgg ccgggcgcag ggcaggctg ctgggggacgc</p>	Homo sapiens

tcaggggcttt ccaccaagc catgggcgct gtcgggcact cggggggtccc ctcggtggctc
cgccactcg gcgtgggcat tacgttggtc tcacatcgcc atccagcctc gaagccaaca
ggactgaaaa atagcttcgg ccaaacgttc tcctccgct aaggagaggg gtcgagtgcg
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gaaggaggca gcgggagcgg agagcgccct ccttagccat cgaatgcctc cttctgtgtt
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acaccatgct cttctgcaag gtctcaaat ttttgacaa agtattctgc tctgtgacca
tctcagctt cctgctatt gcttggaca ggtactactc agtccctat ccaatggaga
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agtgtcctct ttattgagg agtatatga tccatctcag tgatccatgt ccttagtgaa
gtccacatta ttctctgtgg ggacaagagc tgggcagttt tgaatgggtc ttgaggtggg

374	8509	G Protein- Coupled Receptor Ls8509	NP_009154.1	<p>taccccatgt gcactttctg aggatgcctc acttccctgg gctctgcaga gaacacacag agagaagact ttcagagctc acaggagcag ggagcaggag cactctaagg gaattc MGHNGSWISP NASEPHNASG AEAAGVNRSA LGEFGEAQLY RQFTTTVQVW IFIGSLGNF P MVLWSTCRIT VFKSVTNRFI KNLACSGICA SLVCVPFDII LSTSPHCCWW IYTMFLCKVW KFLHKVFCSV TILSFPAIAL DRYYSVLYPL ERKISDAKSR ELVMYIWAHA VVASVPVFAV TNVADIYATS TCTEWSNSL GHLVVVLVYN ITTVIVPVVW VFLELILIRR ALSASQKKKV IIAALRTPQN TISIPYASQR EAEHLATLLS MMVFILCSV PYATLVVYQT VLNVPDTSVF LLLTAVWLPK VSLLANPVL LTVNKSVRKC LIGTLVOLHH RYSRRNVVST GSGMAEASLE PSIRSGSOLL EMFHIGQQOI FKPTEDDEES EAKYIGSADF QAKEIFSTCL EGEQGPQFAP SAPPLSTVDS VSQVAPAAPV EPETFPDKYS LQFGFGPFEL PPQWLSETRN SKKRLPLPLG NTPEELIQTK VPKVGRVERK MSRNKNKVSIF PKVDS</p>	Homo sapiens
375	8896	Neuropeptide Y Receptor Type 6 Pseudogene	NM_006173	<p>ttgataggga tagaaacaca ttggctgtgt tctatagtta acaagatgct gttacattcc A ttgcctcact agctctgaag actatactag cgggacaaaag aaagcacctg agatgagctg agaggagggt aaaggtacac agagatcccc ttgatatttg ttctatgtcc tctcaggggc tttgctacca ctagagaatt atccatatta agaacttgca ttgatattct gggttctgtt tcatttttta gggctcctcaag agcagctca agtcattcac atgtttccat caaatcacaga cacagatcag ggaagattaa accctactaa tttctcgtcg gatgcctcac aacaaggtgc cttccaagaa ctaatggcca aaatatccac ccacaacaca aataagctta gaaaatctct tcttacaatc ctgacacaaat ggaagtcttc ctaaacaccac cagcatctaa tacaaccagc acaaagaaca acaactcggc atttttttac tttagagctc gtcaacacctc tctcagct ttactcctat tatgcatagc ctatactgtg gtcttaattg tgggcctttt tggaaacctc tctctcatca tcatcatctt taagaagcag agaaaagctc agaatttcac cagcactactg attgccaatc tctcctctc tgataccttg gtgtgtgtca tgtgcattca ttttactatc atctacatc tgatggacca ctggatattt ggggatacca tgtgcagact cacatcctat gtgcagagtg tctcaatctc tgtgtccata ttctcacttg tttcactgc tgtcgaaaga tatcagctaa ttgtgaacc cctgggctgg aagcccagtg tgactcatgc ctactggggc atcacactga ttgtgctgtt tctccttctg ctgtctattc ccttcttctt gtctaccac ctcaactgat agcccttcct caacctctct cctcccactg acctctacac ccaccaggtg gcctgtgtgg agaactggcc ctccaaaaag gaccggctgc tcttcaccac ctcccttttt ctgctgcagt attttgttcc tctaggcttc atctcactg gctacttgaa gattgttattc tgcctccgca ggagaaatgc aaaggtagat aagaagaagg aaaaatgagg ccggtcctaat gagaaacaaga ggatcaacac aatgttgatt tccatcgtgg tgacctttgg agcctgctgg ctgccccgaa tatcttcaat gtcatctttg actggtatca tgaggtgctg atgagctgcc accacgacct ggtatttgta gtttgccact tggttgctat ggtttccaca tgtataaacc ctctctttta tggctttctc acaaaaatt tccaaaagga cctggtagt cttattcacc actgctggtg cttcacacct caggaaagat gtgaaaatat tgccatctcc actatgcaca cagactccaa gaggtcttta agattggctc gtataacaac aggtatatga aaattgataa tgctgaagct ctctctgaat gggagctgga caggtaatgg tgggaatagg gcaagatgca gaaagaagaa accagaacca aaaatagcaa cttataccc acttttctt taggctaaga ctgcctgtct catatgtcta tccaacacac cctccaacat acacgaacac acataccacc ccttttctct taagaaaata actctaataa ttcaaacacac ctgcccgcca tcatgtgtgg</p>	Homo sapiens

376	8896	Neuropeptide Y Receptor Type 6 Pseudogene	NP_006164.1	mevslnhpas ntstsknnns affyfesccp pspallllci aytvvlivgl fgnslslilii P sapiens	caaagaatga gaatgagaaa gcagagagag aggcaaacag cagtgatggc tggggaacaa tggtcacaga tacttttatt caatggaata tctacaaaag tstatgactaa tgatatgcct agtaaaaaa ctgctatacc tccttagcac tgagaat
377	9421	Neuropeptide Y Receptor Type 1	nm_000909	akvdkkkene grlnenkrin tmlislvvtf gacwlpriiss mssltgimrc Homo sapiens	cattcccacc ctctcttctt taataagcag gagcgaataa gacaattcc aaagaggatt A gttcagttca agggaatgaa gaattcagaa taattttggt aaatggattc caatcggg aataagaata agctgaacag ttgacctgct ttgaagaac atactgtcca ttgtctataa ataatctata acaacaaac caatcaaat gaattcaaca ttattttccc aggttgaaaa tcattcagtc cactctaatt tctcagagaa gaatgccag ctctgggctt ttgaaaaatga tgattgtcat ctgcccttgg ccattgatatt taccttagct ctgctttatg gagctgtgat cattcttgggt gtctctggaa acctggcctt gatcataatc atctgaaac aaaaggagat gagaaaatgtt accaaccatcc tgatttgtaa cctttccttc tcagacttgc ttgttgccat catgtgtctc cctttacat ttgtctacac attaatggac cactgggtct ttggtgaggg gatgtgtaag ttgaatcctt ttgtgcaatg tggttcaatc actgtgtcca tttctctct ggttctcatt gctgtggaac gacatcagct gataatcaac cctcgagggt ggagacccaa taatagacat gcttatgtag gtattgctgt gatttgggtc ctgctgtgtg ctctctctt gcctttcctg atctaccaag taatgactga tgagcgttc caaatgtaa cacttgatgc gtacaaagac aaatcagtg gctttgatca atttccatcg gactctcata ggtgtgtcta taccactctc ctcttgggtc tgcagtattt tgggtccactt tgttttatat ttatttgcta cttcaagata tatatacgcc taaaaaggag aaacaacatg atggacaaga tgagagacaa taagtacagg tccagtgaac ccaaaagaat caatatcatg ctgctctcca ttgtggtagc atttgcagtc tgcgtggctcc ctcttaccat ctttaacact gtgtttgatt ggaatcatca gatcattgct acctgcaac acaatctgtt attcctgctc tggccacctca cagcaatgat atccacttgt gtcaacccca tattttatgg gtctctgaac aaaaacttcc agagagactt gcagttcttc ttcaactttt gtgatttccg gtctcgggat gatgattatg aaacaatagc catgtccacg atgcacacag atgtttccaa aacttctttg agcgaagcaa gccagtcgc atttaaaaaa tcaacaaca atgatgataa tgaaaaactc tgaactact tatagcctat ggtcccgat gacatctgtt taaaaacaag cacaacctgc acatacttt gattacctgt tctcccaagg aatggggttg aaatcatttg aaatgacta agattttctt gtcttgcttt ttactgcttt tgtgtagtt gtcataatta catttggaa aaaaagtgtg gcttttggg tcttctggaa atagtgttga ccagacatct ttgaagtgtc ttttgaat ttatgcata aatataaaga cttttatct gtactattg gaatgaaatt tctttaagt attacgatgc gctgacttca gaagtacctg ccattccaata cggtcattag attgggtcat ctgattaga ttagattaga ttagattgtc aacagattgg gccatcctta ctttatgata ggcattctt tagtgtgtta caatagtaac agtatgcaa agcagcttc aggagccgaa agatagtctt gaagtcattc agaagtgggt tgaggtttct gtttttgggt ggttttgggt tgttttttt tttttcacc ttaaggaggg ctttcattc ctcccagctg attgtcactt aaatcaaat

378	9421	Neuropeptide NP_000900.1 Y Receptor Type 1	<p> tataaaatga ataaaaagac atactttctca gctgcaataa ttatggagaa ttgggcacccc acaggaatga agagagaaaag cagctcccca acttcaaac cattttgta cctgacaaaca agagcatttt agagtaatta atttaataaa gtaaatagat attgctgcaa atagctaaat tatatttatt tgaattgatg gtaagagat tttccatttt tttacagac tttcagtggt ttgtcaagct tctggtctaa tatgtactcg aaagactttc cgctacaat ttgtagaaac acaaatctcg tttccatac agcagtgcct atatagtac gattttaac tttcaatgtc catctttcaa aggaagtaac accaaggtac aatgttaaag gaattttac ttacctagc agggaaaaat acacaaaaac tgcagatact tcataatagcc cattttaact tgtataaact gtgtgacttg tggcgtctta taaataatgc actgtaaga ttactgaata gtgtgtcat gttaatgtgc ctaatttcat gtatcttgta atcatgtatg agcctcagaa tcatttggag aaactatatt ttaaagaaca agacatact caatgtatta tacagataaa gtattacatg tgtttgattt taaaaggcgc gacattttat taaaatcaat attgtttttg ctttttctga ggagtccttt tcagtttcat tttttctcat cccatgactt cctccgatg gt LIIIIILKQKE MNVTNIIIV NLSFSDLLVA IMCLPFTFVY TMDHWVGE AMCKLNPFVQ CVSITVSIFS LVLIIVERHQ LIINPRGWRP NNRHAYVIGIA VIWLVAVASS LPFLIYQVMT DEPFQNVITLD AYKDKYVCFD QFPSDSHRLS YTTLLLVLOQ FGPLCFIFIC YFKIYIRLKR RNNMMDKMRD NKYRSSETR INIMLLSIVV AFVWCWLPIT IFNTVFDWNH QIIATCNHNL LFLLLCHLTAM ISTCVNPIFY GFINKNFQD LQFFNFCD FRSRDDDYETI AMSTMHTDVS KTSILKQASPV AFKINNND NEKI </p>	Homo sapiens
379	9834	Corticotropin releasing factor Receptor 1	<p> agccgagcga gcccgaggat gggaggggc cgcagctcc gtctcgtcaa ggccttctc A cttctggggc tgaaccccggt cctcgctcc ctcaggacc agcactgcga gacctgtcc ctggccagca acatctcaga caatggctac cgggagtgcc tggccaatgg cagctgggcc gcccgctga attactccga gtgccaggag atcctcaatg aggaagaaa aagcaagggt cactaccatg tcgcagtcac catcaactac ctgggccact gtatctccct ggtggccctc ctggtggcct ttgtcctctt tctgcggctc aggagcatcc ggtgcctgcg aaacatcatc cactggaacc tcactccgc cttcatctg cgcaacgcca cctggttctgt ggtccagcta accatgagcc ccgagggtcca ccagagcaac gtgggctggt gcaggttgggt gacagccgcc tacaactact tccatgtgac caacttcttc tggatgttcg gcgagggtcg ctacctgcac acagccatcg tgctcaccta ctcactgac cggctgcgca aatggatgtt catctgcatt ggctggggtg tgcccttccc catcattgtg gccctgggcca ttgggaagct gtactacgac aatgagaagt gctggttttg caaaggcct ggggtgtaca ccgactacat ctaccaggcc cccatgatcc tggctcctgt gatcaatttc atcttcttt tcaacatcgt ccgcatectc atgaccaagc tccgggcac caccagctct gagaccattc agtacaggaa ggctgtgaaa gccactctgg tgctgctgcc cctcctgggc atcacctaca tgctgttctt cgtcaatccc ggggaggatg aggtctcccc ggtcgtcttc atctactca actccttctt ggaatccttc caggccttct ttgtgtctgt gttctactgt ttcctcaata gtgaggtccg ttctgccatc cggaagaggt ggcaccgggt gcaggacaag cactcgatcc gtgcccaggt ggcctgtgcc atgtccatcc ccacctcccc aacctgtgc agctttcaca gcatcaagca gtccacagca gtctga </p>	Homo sapiens

380	9834	Corticotropin releasing factor Receptor 1	NP_004373.1	MGHPQLRLV ECQEILNEEK AFILRNATWF YSTDLRLKWM LINFIFLNI RVVFIYNSF PTRVSFHSIK QSTAV	KALLLLGLNP KSKVHYHVAV VVLQTMSPV FIGWGVPE VRILMTKLRA LESFQGFVS QSTAV	VSASLDQHC IINYLGHCIS HQSNVWCRL PIIWAIAIGK STTSETIQYR VFYCFINSEV RSAIRKRWHR	ESLSLASNIS LVALLVAFVL VTAAYNYFHV LYYDNEKWF KAVKATILVLL PLIGITYMLF WQDKHSIRAR	DNGYRECLAN FLRLRSIRCL TNFEWMEGEG GRPGVYTDY PLIGITYMLF VARNPGEDEVS VARAMSIPTS	GSWAARVNYS RNIIHWNLLIS CYLHTAIVLT IYQGPMLVL FVNPGEDEVS VARAMSIPTS	Homo sapiens
381	10457	Frizzled-2	NM_001466	cgagtaaagt gaagcgcagt gcggcgggcca ctgccccgcg ggcttctgcc atgcccaacc tatecgctgg gcacccgtgt gcgcgccagg cgctgcgagc gaggacggag gggggcaccc cacccttcc ggcgagcgtg tcacaggagg gcttccacct gagcggccta ggcttcgtgc ttcagcatgg ggcatgaagt tgggccgtgc ctgctgagcg ctagcgccgc tcgctcttcc cggctcatgg atcgcttgct cagcactgca gacttcacgg ttctggatct aacagccgac cttctcctccg acgatcgaaa ccc	ttgcaaaag ctcggggttg gcatgcggcc cggggccggc agccatctc ttctgggcca tgaagggtgca gcacccgtgct gctgcgaagc acttcccgcg ctcccgcgct cgggttgccc actgccccgcg attgtgctgc agacgcgttt tcttactgt tcatttttct tcacaggagcg agggcaccaa ccagctccat ggggccacga cgccgttcaa cgtaggcctc tcttctgta gcatccgcac tgcgcatcgg acttctacga agagcctggc tctacatgat ggtcggggcaa acgggtgagac ccgggggtgg ccatttctact ccc	gcgcgggagg ggggcggggg ccgcagcgcc ccagttccac catcccgctg cacgaaccag gtgctcgccc ggaacaggcc cctcatgaac ccacggcgcc actcaccacc actcaccacc ggcgcgccgc cgctcctcaag gcctgcgaa cgcgcgctc caccacgtac gtcgggctgc cgtggtgtgc gaaggagggc ctggtgggtc ggccatcgag gaccatcacc cgtaggcctc cctgttctc catcatgaag cgtcttctcc gcaggccttc gcaggccttc catcccgctc caaatacctc gacgctgcac caccgtgtga ggccccctaca tttaggttgc agaaactctct gccccaaccc	agcgaggagg gccaaggagc tgetgtgcc gcatctccat tcgctacaa gcctagaggt tcttctgtg gcgctctat ttcagtgccc gcgtcgggca gcggactgca cgcgctacgc atctcagcta cagtttctg cctggtcggg tgcagcgctt ctacatcgcg cggttaccgc tcttcatgat tcactgtgc cctggcgagcc cctggcgccg cgacggcgac gggcttcgtg gggcttcgtg tctcctggc aaagctggag caccatcgct gtgggtgagc catgtcgccc cagtcgggc tcgcctcacc ccgcgcggcg cagcgccggaa taataaaaa gccccaaccc	cgggcggggaa cggtggggg gctgctgctg cccggaaccac ccagaccatc gcaccagtcc cttctctgtg ctccatgtac ctgtgagcgc cgaagtgccc gcgtcgggcca gcggactgca cgcgctacgc atctcagcta cagtttctg cctggtcggg tgcagcgctt ctacatcgcg cggttaccgc tcttcatgat tcactgtgc cctggcgagcc cctggcgccg cgacggcgac gggcttcgtg gggcttcgtg tctcctggc aaagctggag caccatcgct gtgggtgagc catgtcgccc cagtcgggc tcgcctcacc ccgcgcggcg cagcgccggaa taataaaaa gccccaaccc	Homo sapiens	

382	10457	Frizzled-2	NP_001457.1	MRPRSAIPRL LLPLLLPAA GPAQFHGEKG ISIPDHGFCQ PISIPCLCTDI AYNQTIMPNL P LGHNTQEDAG LEVHQFYPLV KVQCSPELRF FLCSMYAPVC TVLEQAIPPC RSICERARQG CEALMNKFGF QWPERLRCEH FPRHGAEQIC VGNHSEDGA PALLTTAPP GLQPGAGGTP GGPGGGGAPP RYATLEHFFH CPRVLKVPSY LSKFLGERD CAAPCEPARP DGSMTFFSQEE TPEARLWILT WSVLCCASTF FTVTTYLVDM QRFYPERPI IFLSGCYTMV SVAYIAGFVL QERVVCNERF SEDGYRTVVQ GTKKEGCTIL FMNLYFFSMA SSIWWVILSL TWFLAAGMKW GHEAIEANSQ YFHLAWAVP AVKTITILAM QDIDGDLISG VCFVGLNSLD PLRGFVLAPL FVYLFIGTSF LLAGFVSLFR IRTIMKHDGT KTEKLERLMV RIGVFSVLYT VPATIVIACY FYEQAFAREHW ERSWVSQCHK SLAIPCPAHY TPRMSPDFTV YMIKYLMTLI VGITSGFWIW SGKTLHSWRK FYTRLNRSRH GETTV	Homo sapiens
383	11968	Putative Leukocyte Platelet-Activating Factor Receptor (HUMNPIIY20)	NM_022571	atggccttac tgggcagcca gcactccggc gccccctccg cggccggggc acctggcggg A acttcctcag cggccacggc ggcctgtctc tccctcagca ccgtggcgac cgcggcgctg gggaacctga cggacgcaag cggaggcggc acagctgccg ctcccgttgg cggcggcctt ggcgggtccg gggcagcgcg ggaggcggg cggcggtga ggcggcgctg agccccggag gcggcgccgc tgcgtgcga cggagctgca gtggcggccc aggcgctcgt cctcctgctc atcttcctgc tgtctagcct tggcaactgc cgccttcac ctgtcgtctg cctatcggg tctgctcacg cagctccgca ccgtaccacaa cgccttcctc cgccttcctg gacctctca ctccgcccgg gggttcggcg gcgtgctct gctgccccgc cgccttcctg gacctctca ctccgcccgg gggttcggcg cctgcgctgc ccggggggcc ctggcgcggc ttctgccggc caagcgcgtt ctccagctcg tgcttcggca tgcgttacgc tcagcgtggc gctcatctcg ttggaccgtt actgcgctat cgtcggccgc cgcggggagaa gatcggccgc cgcgcgcgcg tgcagctgct ggcgggcgcc tggtgacgg cctgggctt ctccctggcc tgggagctgc tggggggccc ccgggaactc gcggcgggccc agagcttcca cggctgcctc taccggacct ccccgagccc cgcgcagctg ggcgccccct tcagcgtggg gctggtggtg gctgctacc tgcgtccctt cctgctcacc tgcttcgccc actaccacat ctgcaagacg gtgcgcctgt cggacgtgcg cgtgcgggccc gtgaacacct acgcgcgcgt gctgcgttct tcagcagagt gcgcacggcc accaccgtcc tcacatga	Homo sapiens
384	11968	Putative Leukocyte Platelet-Activating Factor Receptor (HUMNPIIY20)	NP_072093.1	MALLGSQHS APSAAGPPGG TSSAATAAVL SFSTVATAAL GNLSDASGGG TAAAPGGGGL P GGSGAAREAG AAVRRPLGPE AAPLLSHGAA VAAQALVLLL IFLSSLGNC AVMGVIVKHR QLRTVTNAFI LSLSLDLLT ALLCLPAAF DLFTPPGSA PALPAGPWRG FCRPSRFFSS CFGIVYAQRG AHLVGPLLRY RRPPEKIGR RRALQLLAGA WLTALGFSLP WELLGAPREL AAGQSFHGCL YRTSPDPAQL GGPFVGLVW ACYLLPFELI CFCHYHICKT VRLSDVRVRP VNTYARVLR SARCARPPPS SS	Homo sapiens
385	14198	Interleukin-8 Receptor B	nm_001557	cattcagaga cagaaggttg atagacaaat ctccaccttc agactggtag gctcctccag A aagccatcag acaggaagat gtgaaaaatcc ccagcactca tcccagaatc actaagtggc acctgtcctg ggccaaagtc ccagacaga cctcattgtt cctctgtggg aatacctccc caggagggca tccctgattt ccccttgca acccaggtca gaagtctcat cgtcaaggtt gtttcatctt ttttttcctg tctaacagct ctgactacca cccaaccttg aggcacagtg aagacatcgg tggccactcc aataacagca ggtcacagct gctcttctgg aggtgccta caggtgaaaa gccccagcgac ccagtcagga tttaagtta cctcaaaaat ggaagatttt	Homo sapiens

aacatggaga gtgacagctt tgaagatttc tggaaagggtg aagatcttag taattacagt
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tggcactcta tgttctaaga agtgaaaatc tacactccag tgagacagct ctgcatactc
attaggatgg ctagtatcaa aagaaagaaa atcaggctgg ccaacgggggt gaaacctgtc
ttactataaa atacaaaaaa aaaaaaaat tagccgggcy tgggtggtgag tgcctgtaat
cacagctact tgggaggcty agatgggaga atcacttga cccgggagca gaggttgca
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gacttaatgc cactaaattg acacttaaaa atggtttaaa tggtaattt tgttatgtat
atttatatc aatttaaaaa aaaacctgag ccccaaaagg tatttaatc accaaggctg
attaaccaa ggctagaacc acctgcctat atttttgtt aaatgatttc atcaatc
tttttttaa taaccattt ttacttgggt gtttat

386	14198	Interleukin-8 Receptor B	NP_001548.1	MEDFNMSDS	FEDEFWKGEDL	SNYSYSSTLP	PFLDDAAPCE	PESLEINKYF	VWIIYALVFL	P	Homo sapiens	
				LSLLGNSLVM	LVILYSRVGR	SVTDVYLLNL	ALADLLFALT	LPIWAASKVN	GWIFGTFLCK			
				VVSLKEVNE	YSGILLACI	SVDRYLAIVH	ATRTLTKRY	LVKFICLSIW	GLSLLALPV			
				LLFRRTVYSS	NVSPACYEDM	GNNTANWRML	LRILPQSFGF	IVPLLIIMLFC	YGFTLRLTFK			
				AHMGQKHRAM	RVIFAVVLIF	LLCWLPLYNLV	LLADTLMRTQ	VIQETCERN	HIDRALDATE			
				ILGILHSLCN	PLIYAFIGQK	FRHGLLKILA	IHGLISKDSL	PKDSRPSFVG	SSSGHTSTTL			
387	14641	Calcitonin Receptor	NM_001742		cagaattcca	ggacaaagag	atcttcaaaa	atcaaaaaatg	aggttccat	ttacaagcgg	A	Homo sapiens
				gtgcttgcca	ctgtttcttc	ttctaaatca	cccaaccca	attcttctg	cttttcaaa			
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				catgatggcc	tgaactatt	tctggatgct	ctgtgaagg	atctatcttc	atacactcat			
				tgtcgtggct	gtgtttactg	agaagcaacg	cttcggtgg	tattatctct	tgggctgggg			
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388	14641	Calcitonin Receptor	NP_001733.1	<p> aacattaca tgctcagctt ggttttggac aagcctgtcc attgggcagg acctagctgt tgtaagaat tggctttaat gttgaatgta ttttggtgc tgatgttat aaactgagag gtcacaaaga atctatcact aaaaattttt acaaaactgc caaaaataata attcttagtg gaagacaata ctccctttaa agagagtttg ccaactccct aaactccagg attataaag caaattactc caaggtttat aaagcagatt acctctgccc ctgggtgct atctagcagt aaaagataaa ttgtgtgaat attggttaatt aaaagactcc acataagtc attaactgct ttccaccag cttcaagct taaaaagagc tcaggctttt ccagggaagat ccaggagggc taattagaaa tcaacttggt gttgaccgct tgtttcttgt tattaccaaa caggagggga aaaaattaac tgcctcaaat ttaaccataa atcaattcat gtttaacgtt tctcattaaa atccagtatt atattatcat atctctctt acttcccagt ataagatttt tgaataatcct gaataaaacca gtatcggttac tggcaccctga aattaatttg tgaatttgca acagtaatca gagttaccat tatttaattt gtatgctaaa tgaggaggta cattgaaacc ctccaaatct ccagtcctcat ctatgtcata ttttgccact gcctttcaga agtgatttag ttgtggaaaag ataataaatt gatttggtat ggttacatat ttagcgcacc cagagaaaaa taattatatt tctacagaga aaatgaattt gggatactaa agtagtttaa gtctccttta ctgaatgtaa gggggggac gaaaagaagg tatttttcca atcacaggt tatgtagtagt tgttctatatt ttgtttacaa acatggaaaa cagagtattt ctggcagctg tggtaacaaat gtgataatat attgctaaaa tattttagat gttattatgc taatatagta ggggttgaag aaaaacaaat agcttattat agaattgcac atagttctgc ccaaatatag tgaatgctt atgcttgtgt atatgtataa attaatcacag agtacgttaa aagcaaaaaa atgtatatatt gcataatttt ctaaagaaat atattattca tcttttcatt c </p>	Homo sapiens
389	16041	C-C Chemokine Receptor 6	NM_004367	<p> MRFTFTSRCL ALELLNHPT PILPAFSNQT YPTIEPKPFL YVGRKKKMD AQKCYDRMQ P QLPAYQGEPP YCNRTWDGWL CWDDTPAGVL SYQFCPDYFP DFDSEKVKF YCDEKGVWFK HPENRTWSN YTMCAFTPE KLKNAYVLY LAIVGHSLSI FTLVISLGIF VFRSLGCQR VTLHKMFLT YLNSMIII HLVEVPNGE LVRRDPVSK ILHFFHQYMM ACNYFWMLCE GIYHLTLIV AVTEKQRLR WYLLGWGFP LVPTTIHAI RAVYENDNCW LSVETHLLYI IHGPVMAALV VNFELNLIV RVLVTMRET HEAESHYLK AVKATMILVP LLGIQFVFP WRPSNKMGLK IYDVMHSLI HFQGFVATI YFCNNEVQT TVKRQWAQFK IQWNQRWGRR PSNRSARAAA AAAEAGDPI YICHQELRNE PANNQGEESA EIIPLNIEQ ESSA caaacgttcc caaatcttcc cagtcggctt gcagagactc ctgtctccca ggagataaac A agaagctga tcttattgac agatggtcat cacattggtg agctggagtc atcagattgt ggggcccgga gtgaggtga agggagtga tcagagcact gcctgagagt cactctact ttcctgctac cgtgctgt gagctgaagg ggctgaacca tacactcctt ttctacaac cagcttgcat ttttctgccc caaatgagc gggaatcaa tgaatttcag cgatgttttc gactccagt aagattattt tgtgtcagtc aatactcat attactcagt tgattctgag atgttactgt gctccttgca ggaggtcagg cagttctcca ggctatttgt accgattgcc tactccttga tctgtgctt tggcctcctg gggaatattc tgggtgtgat cactttgtct ttttataaga aggccaggtc tatgacagac gtctatctct tgaacatggc cattgcagac atcctctttg tcttactct cccattctgg gcagtgagtc atgccactgg tgcgtgggtt ttcagcaatg ccacgtgcaa gttgctaaa ggcattctatg ccatcaactt taactgcggg atgctgctcc tgacttgcat tagcatggac cgggtacatcg ccattgtaca ggcgactaag </p>	Homo sapiens

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390 16041 C-C Chemokine Receptor 6 NP_004358.1

Homo sapiens

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 SETADNDNAS SFTM

391 16599 Smoothened NM_005631 Homo sapiens

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ISDOCID: 1420 0206100742 1 ~

393	17250	G Protein- Coupled Receptor GPR45	NM_007227	AGDSCRQGAW TLVSNPFCPE PSPQDPFELP SAPAPVAWAH GRRQGLGPIH SRTNLMDEL MDADSDF	atggcctgca acagcacgtc ccttgaggct tacacatacc tgctgctgaa caccagcaac A gcctcagact cggggtccac ccagttgccc gcacccctca ggaatcctctt ggccatagtg atgtgctga tgaccgtggt ggggttccctg ggcaaacactg tggctgtgcat catcgtgtac cagaggccgg ctatgcgtc ggccatcaac ctgctgctgg caacccctggc cttctccgac atcatgctgt cctctgctg catgcccttc accgcgtca cctcatcac cgtgcgctgg cactttgggg accacttctg ccgctctca gccacgtct actggttttt tgctctggag ggcgtggcca tctgtctcat catcagcgtg gccgcttcc tcatcatcgt ccagcgccag gacaagctga acccgcgag ggccaaagt atcatcgcg tctcctgggt gctgtccttc tgcatcgcg ggccctcgt caccggctgg acgtggtgg aggtgccgg gcgggcccga cagtgcgtgc tgggctacac ggagctccc gctgaccgg catacgtggt cacttggtg gtggcgtgt tcttcgccc ctttggcgtc atgctgtgc cctacatgtg cactcctaac acggtccgca agaaccgct gcgctgcac aaccagtcgg acagcctgga cctgcggcag ctcaccagg cgggctgcg gcgctgcag cggcagcaac aggtcagcgt ggacttgagc ttcaagacca aggccttcac caccatcctg atcctcttcg tgggttcttc cctctgctgg ctgcccact cgtctacag cctcctgctc gtgttagcc agcgtttta ctgcggttcc tcttctacg ccaccagcac ctgcgtcctg tggttcagtt acctcaagtc cgtcttcaac cccatcgtct actgctggag aatcaaaaaa ttccgcgagg cctgcataga gttgctgccc cagaccttc aaatcctccc aaagtgcct gagcggtacc gaaggagaat ccagccaagc acagtatacg tgtgcaatga aaaccagctc gcggttag	Homo sapiens
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396 17345 G Protein-
Coupled
Receptor D6 NP_001287.2 Homo sapiens

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397 17535 Gaba(b)
Receptor 1 NM_001470 Homo sapiens

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399	17666	Glucagon- Like Peptide 1 Receptor	NM_002062	gaattccggg ttgtgcatc cactctggaa ccgctcgtgt gtggcctgtc ggaatgacat A cgccctcatc agtctccga cgcgttccc aggtggcagc gatggcccag tctgaactc ccgcctatgg ccggccccc ccgctcgtgt cgccttgccg tctgctgtct cgggatgggtg ggcaggccg gccccccc ccagggtgcc actgtgtccc tctggagagc ggtgcagaaa tggcagaaat accgacgcca gtgccagcgc tccctgactg aggatccacc tctgcccaca gactgttct gcaaccggac cttcgatgaa tacgctctgt ggcagatgg ggagccaggc tcgttcgtga atgtcagctg cccctggtag cgcctcggg ccagcagtgt gccgcagggc cacgttacc ggttcgtcac agctgaaggc cttcggctgc agaaggaaa ctcacgcctg ccctggaggg actgtcga gtgcaggag tccaagcag gggagagaag ctcctcggag gagcagctcc tgttcctcta catcatctac acggtgggt acgcactctc cttctctgt ctggttatcg cctctgcgat cctcctcggc ttcagacacc tgcactgcac caggaactac atccacctga acctgttgc atccttcac ctcgcgagcat tgtccgtctt catcaaggac gcagccctga agtggatga tagcacagcc gccacagc accagtggga tgggctcctc tcctacctgg actctctag ctgcccgcctg gtgtttctgc tcatgcagta ctgtgtggcg	Homo sapiens

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401	18471	G Protein-Coupled Receptor LOC51210	NM_016372	gccttgacac tggagatgct tagctgagg ggtggctttg ttagactatt tgcaggctcg A gagatagagc ctgagatggg ggactgggccc cctgcctggg ggattgggtc gtagcctgtg tggagcccca cactgagctg cagtgggtgg ggagggtggt ttacaggggt gctctgtgca gcccctctga tttccccctg ggagtccacg gtccagggga aggaggacag tggcccaggc cacacagctc actggggcgc tctcactccc ccagggtggt ctgctggcgg gatggacacc ctggaggagg tgaactgggc caatgggagc acagcgctac ccccacccct ggacacaaac atcagtgctc ctcatcgctg cctgctgctg ctctacgaag acattggcac ctccagggtc cggtaactggg acctcttctg gctcactccc aatgtgctct tctcatctt cctgctctgg aagcttccat ctgctcgggc gaagatccgc atcactcca gccccattt tatcaccttc tacatcctgg tgtttgtggt ggcgctgggt ggcaattgccc gggcgtgggt atccatgacg gtgagcacct cgaacgctgc aactgttctt gataagatcc tgtgggagat caccgccttc ttcctgctgg ccategagct gagtgtgac atcctgggccc tggcctttgg cactggggag agtaagtcca gcatcaagcg ggtgctggcc atcaacacag tgtgttccc ggctactct gtcaccacag ggaccttga gctcctgtac cctgatgccc atctctcagc tgaggacttt aatatctatg gccatggggg ccgccagttc tggctgggtca gctcctgctt cttcttcttg gtctactctc tgggtgtcat ccttcccaag acccgcgtga aggagcgcat cctcctgcct tctcggagga gcttctacgt gtatgcgggc atcctgggac tgcacaacct actgcagggg ctggggagtg tgctgctgtg cttcgacatc atcgaggggc tctgctgtg agatgccaca accttctctg acttcagctt cttcgctcgg tggcttctc tggcttctc ccggggcttc ttcggctcgg agcccaagat cctcttctcc tacaatgcc aagtggacga gacagaggag	gcttctctctg ttagactatt tgcaggctcg A ggattgggtc gtagcctgtg ttacaggggt gctctgtgca aggaggacag tggcccaggc ctgctggcgg gatggacacc ccccacccct ggacacaaac acattggcac ctccagggtc tctcatctt cctgctctgg gccccattt tatcaccttc gggcgtgggt atccatgacg tgtgggagat caccgccttc tggcctttgg cactggggag tgtgttccc ggctactct atctctcagc tgaggacttt gctcctgctt cttcttcttg aggagcgcat cctcctgcct tgcacaacct actgcagggg tctgctgtg agatgccaca tggcttctc ccggggcttc aagtggacga gacagaggag	Homo sapiens

[illegible]

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Ls19072

405 19501 19501 G Protein-
Coupled
Receptor
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409	22315	G Protein- Coupled Receptor GPR92/GPR93	NM_020400	<p>atgttagcca acagctcctc aaccaacagt tctgttctcc cgtgtcctga ctaccgacct A</p> <p>accaccgcc tgcacttggt ggctacagc ttggtgctgg ctgcccgggt cccctcaac</p> <p>gcgctagccc tctgggtctt cctgcgcgcg ctgcgcgtgc actcgggtgt gagcgtgtac</p> <p>atgtgtaacc tggcggccag cgacctgtc gccctctct gacctctct cgtctctcc</p> <p>tactacgcac tgcaccactg gccctctccc gacctctgt gccagacgac gggcgccatc</p> <p>ttccagatga acatgtacgg cagctgcac ttctgatgc tcatcaacgt ggaccgctac</p> <p>gcgcacatcg tgcaccgct gcgactgcgc cactgcggc ggccccgct ggcgcggctg</p> <p>ctctgcctgg gcgtgtggc gctcactctg gtgttgccg tgccccgcgc ccgcgtgcac</p> <p>agggcctcgc gttgccgcta ccgggacctc gaggtgcgcc tatgttcga gagcttcagc</p> <p>gacgagctgt ggaaggcag gctgtgccc ctctgtctgc tggccgagcc gctgggcttc</p> <p>ctgtgcccc tggcggcgggt ggttactcg tgggcccag tcttctggac gctggcgcgc</p> <p>cccgacgcca cgcagagcca gcggcgccg aagaccgtgc gcctctgct ggctaacctc</p> <p>gtcatcttcc tgctgtgctt cgtgccctac aacagacgc tggcggctta cgggctgctg</p> <p>cggagcaagc tgggtggcgc cagcgtgcct gccgcgcatc gcgtgcgcgc ggtgctgatg</p>	Homo sapiens

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SSFTQCPQDS AL				
411	22925	Latrophilin- 3	NM_015236	gaaaaacacg agccgtgttg tatgtggagg ccccggtgtc tgggtgtaat tctcgttctc A Homo sapiens
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Homo
sapiens

P

IMIESANYGR

IELRCPGTDV

AGPDVFPDPC

PGTYKYLEVQ

3

NP_056051.1

Latrophilin-

22925

412

413	25359	G Protein- Coupled Receptor GPR34	NM_005330	<p>YECVPYKVEQ KVFLLCPGLLK GVVQSEHLFE SDHQSGAWCK DPLQASDKIY YMPWTPYRTD TLTEYSSKDD FIAGRPTTTY KLPHRVDTGT FVYDYGALFF NKERTRNIVK FDLTRIKSG EAIIANANYH DTSPYRWGGK SDIDLAVDEN GLWYIYATEQ NNGKIVISQL NPYTLRIEGT WDTAYDKRSA SNAFMICGIL YVVKSVYEDD DNEATGNKID YIYNTDQSKD SLVDVFPFNS YQYIAAVDYN PRDNLIVWN NYHVWKYSLD FGLDSRSQ AHGQVSYIS PPIHLDSELE RPSVKDISTT GPLGMGSTTT STTLRTTLLS PGRSTTPSVS GRNRSTSTP SPAVEVLDDM TTHLPSASSQ IPALEESCEA VEAREIMWEK TRQQIAKQP CPAGTIGVST YLCLAPDGIW DPQGPDLNSC SSPWNHITQ KLKSGETAAN IARELAEQTR NHLNAGDITY SVRAMDQLVG LLDVQLRNLIT PGGKDSAARS LNKLOKRERS CRAYVQAMVE TVNNLLQPOA LNAWRDLTTS DQLRAATMLL HTVESAFVL ADNLLKTDIV RENTDNKLE VARLSTEGNL EDLKFENMG HGSTIQLSAN TLKONGRNGE IRVAFVLYNN LGPYLSTENA SMKLGTEALS TNHSVIVNSP VITAAINKEF SNKVYLADPV VFTVKHIKQS EENFNPCSF WSYSKRRTMTG YWSTQGCRLI TTNKTHTTCS CNHLTNFAVL MAHVEVKHSD AVHDLLEDVI TWVGILLSLV CLLICIFTFC FFRGLQSDRN TIHKNLCISL FVAELLFLIG INRTDQPIAC AVFAALLHFF FLAFTWMFL EGVQLYIMLV EVFEHSRR KYFYLVGGM PALIVAVSAA VDYSYGYTDK VCWLRLDTYF IWSFIGPATL IIMLVIFLG IALYKMFHHT AILKPESGCL DNINYEDNRP FIKSWVIGAI ALLCLLGLTW AFGLMYINES TVIMAYLFTI FNSLQGMFIF IFHCVLQKKV RKEYGKCLRT HCCSGKSTES SIGSGKTS GS RTPGRYSTGS QSRIRRMWMD TVRKQSESEF ITGDINSSAS INREPYRETS MGKVLNIAYQ IGASEQCQGY KCHGYSTTEM</p> <p>atgagaagtc ataccataac aatgacgaca acttcagtc a gcagctggcc ttactcctcc A cacagaatgc gctttataac caatcatagc gaccaaccgc cacaaaactt ctacagcaaca ccaaatgtta ctactgtcc catggatgaa aaatgtctat ctactgtgtt aaccacatcc tactctgtta ttttcactgt gggactggtt gggacacataa tcgcccctta tgtatttctg ggtattcacc gtaaaagaaa ttccattcaa atattatctac ttaacgtagc cattgcagac ctcctactca tcttctgcct cctttccga ataatgtatc atattaccca aaacaagtgg acactaggtg tgattctgtg caaggtgtg ggaacactgt tttatatgaa catgtacatt agcattattt tgcttggtt catcagttg gatcgctata taaaaattaa tcggtctata cagcaacgga aggcaataac aaccaaaaca agtatttatg tctgtgtgat agtatggatg cttgctcttg gtgattcct aactatgatt atttaaacac ttaagaaagg aggcataat tccacaatgt gttccatta cagagataag cataacgcaa aaggagaagc catttttaac ttcattcttg tggtaatgtt ctggctaatt ttcttactaa taatcctttc atatattaag atgggaaga atctattgag gatttctaaa aggaggtcaa aatttctaa ttctggtaaa tatgccacta cagctcgtaa ctcctttatt gtacttatca ttttactat atgtttgtt ccctatcatg ccttctgatt catctacatt tcttcacagc taaatgtatc atcttgctac tggaagaaa ttgttcacaa aaccaatgag atcatgctgg ttctctcatc ttcaatagt tgcttagatc cagtcagtga tttcctgatg tccagtaaca ttcgaaaaa aatgtgcaa cttcttttta gacgatttca agtggaacca agtaggagtg aaagcacttc agaatttaa ccaggatact cctgcatga tacatctgtg gcagtgaata tacagtctag ttctaaaagt actga</p>	Homo sapiens
414	25359	G Protein- Coupled	NP_005291.1	<p>MRSHITMTT TSVSSWPYSS HRMRFTNHS DQPPQNFSA PNVVTCPMDE KLLSTVLTTS P YSVIFIVGLV GNIALYVFL GIHRKRNSIQ IYLLNVAIAD LLLIFCLPFR IMYHINQNKW</p>	Homo sapiens

Receptor GPR34	30698	G Protein- Coupled Receptor Is30698	AX068267	415	<p> TLGVILCKVV GTLFVNMVYI SIILLGFISL DRYIKINRSI QQRKAITTKQ SIYVCCIVMM LALGGFLTMI ILTLKKGGHN STMCFHYRDK HNAKGAEAFN FILVVMFWLI FLIIILSYIK IGKNLLRISK RRSKFPNSGK YATTARNSEFI VLIIFTICFV PYHAFRFIYI SSQNLNVSSCY WKEIVHKTNE IMLVLSSFNS CLDPVMYFLM SSNIRKIMCQ LLFRRFQGEF SRSESTSEFK PGYSLHDTSV AVKIQSSSKS T </p>	<p> gttctcagat cggcttctcg caacaggcag tcagttctca ctgggcccct tggactccca A ttccaataat ggagaagaca gatcacagcc actgaccagg gaccgtggga ggtgccacgt gatggtgagg catcatgcta gggagctgag ctctgacctt cctgctgggt gattctccac ctctgggctg ctagatctac ttcttggtat ccgtgaagat cctcatgtat gaaaatgaag tcccaggcaa ccattgatttg ctgcttagtg ttctttctgt ccacagaatg ttcccactat agatccaaga ttcaactaaa agctatagt gaagtggcca accacatcct cgacacagca gccatttcaa actgggcttt cattcccaac aaaaatgcca gctcgatttt gttgcagtica gtgaatttgt ttgccagaca actccacatc cacaataatt ctgagaacat tgtgaatgaa ctcttcattc agacaaaagg gtttcacatc aaccataata cctcagagaa aagcctcaat ttctccatga gcatgaacaa taccacagaa gatattcttag gaatggtaca gattccccagg caagagctaa ggaagctgtg gccaaatgca tcccaagcca ttagcatagc ttccccaaac ttgggggcta tctgagaga agcccacttg caaaatgtga gtcttccag acaggtaaat ggtctggtgc tateagtgtt ttaccagaa aggttgcaag aaatcatact cacttcgaa aagatcaata aaaccgcaa tgccagagcc cagtggttg gctggcactc caagaaaagg agatgggatg agaaagcgtg ccaaatgat ttggatatca ggaacgaagt gaaatgccgc tgtaactaca ccagtgtgtt gatgtctttt tccattctca gtctctccaa atcgatgacc gacaaagtct tggactacat cactgcatt gggctcagcg tctcaatcct aagcttgggt ctttgcctga tcattgaagc cacagtgttg tccgggttg ttgtgacgga gatatacat atgcgtcacg tgtgcatcgt gaatatagca gtgtcccttc tgactgcca tggtgtggtt atcataggct ctacatttaa cattaaggcc caggactaca acatgtgtgt tgcagtga ttttccagcc actttttcta cctctctctg ttttcttga tgctctcaa agcattgctc atcatttatg gaatatgtgt catttccgt aggatgatga agtcccgaat gatggtcatt ggctttgcca ttggctatgg gtgccattg gtacattgtg tcaactagat tgctatcaca gagccagaga acggtacat gagacctgag gctgttggc ttaactggga caataccaaa gcccttttag catttgcat cccggcgctt gctattgttg ctgtaaatct gattgtggtt ttgggtgttg ctgtcaacac tcagaggccc tctattggca gtcccaagtc tcaggatgtg gtcataatta tgaggatcag caaaaatgtt gccatctcca ctcactgct gggactgacc tgggggttttg gaatagccac tctcatagaa ggcacttctc tgacgttcca tataattttt gccttgctca atgctttcca gggttttttc atctgctgt ttggaacctc tatggatcac aagataagag atgctttgag gatgaggatg tcttcactga aggggaaatc gagggcagct gagaatgcat cactaggccc aaccaatgga tctaaattaa tgaatcgtca aggatgaaat gctgccccat ttctcatgga tctcctgaga ccaagagggg agatccagga gaaagagcc atggaaagca ggctggagt agagggaatg gtcattgttc cttggaagac ttctcttct tgtcaggagt gactcccaag ctcttggtcg gccgaagaaa aactgaggat aacatttgc gactgggctt taaggagcat gatttatgga ccccttaacc taccgtgccc ctgcaagagg ctggcttctt ggtcaatctt gactagatta agagtcaatc tgcaagccat ttatggctc </p>	<p> Homo sapiens </p>
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416 30698 G Protein-
Coupled
Receptor
Ls30698 CAC27252.1 Homo sapiens

ccctggccag ctgggggctg tagggccctg ctgggcttgg tgcgttttca ctctgaggg
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QG

417 30875 G Protein-
Coupled
Receptor
GPR87/GPR95 NM_023915 Homo sapiens

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419	31568	G Protein-Coupled Receptor RE2	NM_007369	MSLNSSLSCR KEISNLTEEE GEGGVIIQT FIAIIVITF VCLGNLVIW TLYKKSLLT P LSNKFVFSLT LSNFLSLVL LPFVVTSSIR REWIFGVWC NFSALLYLLI SSASMLTLGV IAIDRYAVL YPMVPMKIT GNRAVMALVY IWLHSLIGCL PPLFGWSSVE FDEFKWMCA AWHREPGYA FWQIWCALFP FLVMLVCYGF IFRVARVKAR KVHCGTIVIV EEDAQRTRK NSSTSTSSSG SRRNAFQGW YSANQCKALI TILVVLGAFM VTWGPYMWVI ASEALWGKSS VSPSLETWAT WLSFASAVCH PLIYGLMNKT VRKELLMCF GDRYYRPFV QRQTSRLFS ISNRITDLGL SPHLTALMAG GQPLGHSST GDTGFSCSQD SGNLRLAL atggacacct cccggtcctg tgtgtcctctg tcttgcctg tgctgtctga gctggcgacc A gggggcagct cctccaggct tgggtgtgtg ctgagggggt gccccacaca ctgtcattgc	Homo sapiens
420	31568	G Protein-Coupled Receptor RE2	NP_031395.1		Homo sapiens
421	36534	G Protein-Coupled	NM_003667		Homo sapiens

Receptor
GPR49

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gcaatttggag tgtgtgagaa tgcctataag atttctaatac aatggaataa aggtgacaac
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accattgcct acaccaagct ctactgcaat ttggacaagg gagacctgga gaattttgg
gactgctcta tggtaaaaaa cattgcccctg ttgctcttca ccaactgcat cctaaactgc
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attaagttaa tcttctgtgt ggtagtcaca cttcctgcat gtctcaatcc ctttctctac
atcttgttca atcctcactt taaggaggat ctggtagacc tgagaaagca aacctacgtc
tggaacaagt caaacaccc aagcttgatg tcaattaaat ctgatgatgt cgaaaaacag

422	36534	G Protein- Coupled Receptor GPR49	NP_003658.1	<p>tctgtgact caactcaagc cttggttaacc ttaccagct ccagcatcac ttatgacctg cctccagtt ccgtgccatc accagcttat ccagtgactg agagctgcca tcttctctg gtggcattg tcccatgtct ctaa</p> <p>MDTSLRGVLL SLPLLIQLAT GSSSPRSGLV LRGPPTHCHC EPDGRMLLRV DCSDLGLSEL P PSNLSVFTSY LDLSMNNISQ LLPNPLPSLR FLEELRLAGN ALTYIPKGAF TGLYSLKVLM LQNNQLRHVP TEALQNLRSI QSLRLDANHI SYVPPSCFSG LHSRLHMLD DNALTEIPVQ AFRSLSALQA MTLALNKIHH IPDYAFGNLS SLVVLHLHNN RIHSLGKKCF DGLHSLDTLD LNNNLDEFP TAIRTLNLK ELGFHSNNIR SIPEKAFVGN PSLLTIHFYD NPIQFVGRSA FQHLPELRTL TLNGASQITE FPDLTGTANL ESLLTGAQI SSLPQTVCNQ LPNLQVLDLS YNLLEDLPF SVCKLQKID LRHNEIYEIK VDTFQQLLS RSLNLAWNKI AIIHPNAFST LPSLIKLDLS SNLLSFPIT GLHGLTHLKL TGNHALQSLI SSENFPPELV IEMPYAYQCC AFGVCEINAYK ISNQWNKGDN SSMDDLHKDD AGMFOAQDER DLEDFLLDFE EDLKALHSVQ CSPSPGPFKP CEHLLDGWL I RIGVWTIAVL ALTCNALVTS TVERSPLYIS PIKLLIGVIA AVNMLTGVSS AVLAGVDAFT FGSEFARHGAW WENGVGCHVI GFLSIFASES SVFLTLAAL ERGESVKYSA KFETKAPFSS LKVIILLCAL IALTMAAVPL LGGSKYGASP LCLPLPFGEF STMGYMVALI LINSICFLMM TIAYTKLYCN LDKGDLENIW DCSMVKHAL LLFTNCILNC PVAFLSFSSL INLTFFISPEV IKFILLVVP LPACLNPLLY ILFNPHFKEF LVSLRKQTYV WTRSKHPSLM SINSDDVEKQ SCDSTQALVT FTSSSITYDL PPSSVPSPAY PVTESCHLSS VAFVPC</p>	Homo sapiens
423	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NM_004736	<p>actagagatg gcgggcgggc tgctctgaag agacctcggc ggcgcgaggag gaggagagaa A gcgcagcgcc gcgcgcgcgc ggggcccatg tggggaggag tcggagtcgc tgttgcgcgc gccgcctga gctgctggac ccgagtgga gtgagggga aacggcagga tgaagtccgc cgagcacctc tccgcgcaca tcactccga gtggaggag caatacatcc agtatgaggc tttcaaggat atgctgtatt cagctcagga ccaggcacct tctgtggaag ttacagatga ggacacagta aagaggtatt ttgccagtt tgaagagaag ttttccaaa cctgtgaaaa agaacttgcc aaaaatcaaca catcttattc agagaagctc gcagaggctc agcgagggtt tgctacactt cagaatgagc ttcatgtcatc actggatgca cagaaagaaa gcactggtgt tactacgtg cgacaaacgca gaaagccagt cttccacttg tcccatgagg aacgtgtcca acatagaaat attaaagacc ttaaactggc cttcagtgag tctacatcca gtctaatcct gctgcagaac tatcagaatc tgaattttac aggttttcga aaaatcctga aaaagcatga caagatcctg gaaacatctc gtggagcaga ttggcgagt gctcacgtag aggtggcccc atthttatac tgcaagaaaa tcaaccagct tatctctgaa actgaggctg tagtgaccaa tgaacttgaa gatggtgaca gacaaaaggc tatgaagcgt ttacgtgtcc cccctttggg agctgctcag cctgcaccag catggactac ttttagagtt ggcctatttt gtggaatatt cattgtactg aatatattcc ttgtgcttgc cgctgtattt aaactgaaa cagatagaag tatatggccc ttgataagaa tctatcgggg tggctttctt ctgattgaat tctttttct actgggcac aacacgtatg gttggagaca ggctggagta aacctgtac tcatctttga acttaaatccg agaagcaatt tgtctcatca acatctctt gagattgctg gattcctcgg gatattgtgg tgcctgagcc ttctggcatg cttctttgct ccaattagtg tcatccccac atatgtgtat ccacttgccc tttatggatt tatggttttc ttccttatca acccaaccaa aactttctac tataaatccc ggttttggct gcttaaaactg ctgtttcag tatttacagc</p>	Homo sapiens

424	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	NP_004727.1	<p>cccttccat aaggtaggct ttgctgattt ctggctggcg gacagctga acagcctgtc agtatactg atggacctgg aatatatgat ctgtcttac agtttgagc tcaaatggga tgaagtaag ggcctgttgc caataattc agaagaatca ggaatttgc acaatatac atatggtgtg cgggccattg ttcagtgcac tctgcttgg ctcgcttca tccagtgcct gcccagatat cgagacacaa aaaggccctt tctcatatta gttaatgctg gcaagtactc cacaacttcc ttcatgggtg cgtttgcagc cctttacagc actcacaag aacgaggtca ctcgacact atgggtgttct tttaacctgtg gattgtcttt tatacatca gttcctgcta tacctcatc tgggatctca agatggactg ggtctcttc gataagaatg ctggagagaa cactttcctc cgggaagaga ttgtataccc ccaaaagcc tactactact gtgccataat agaggatgtg attctgcgct ttgcttggac tatccaaatc tgcattacct ctacaacttt gttgccctcat tctggggaca tcattgtctac tgccttggc ccaattgagg ttttccggcg atttgtgtgg aacttcttc gcctggagaa tgaacatctg aataactgtg gtgaattccg tgctgtgcgg gacatctctg tggcccccct gaacgagat gacagactc tctagaaca gatgatggac caggatgatg ggtacgaaa ccgccagaag aatcggtcat ggaagtacaa ccagagcata tccctgcgc gcctcgcct cgtttctcaa tccaaggctc gtgacactaa ggtattgata gaagacacag atgatgaagc taacacttga atttctgaa gtctagctta acatcttttg ttttctact ctacaatcct tctctgacc aacgcaacct ctagtacctt tccagccgaa aacaggagaa aacacataac acatttccg agctctccg gatcggatcc tatggactcc aaacaagctc actgtgttct tttcttttc tctggttta atttaattt tctattttca aaacaagtat ttacttcat tgcacatcag aggatgtttt aagaacaaa acatagtatc ttatggattg ttacacata caaggacata gatactatc aggatgaaga acaggcattg caaggaccct ctgatgggac ggtactgaga tatctcggct tccgctcagc ccggttttga atggttga aa ccggacattg gtttttaaat ttttgcag tttatgtgga gaattttttt ctttcttca taccagcgc aaaggcactg gccgacttg caggaaaagt gcaacttaa gcagtacctt cattcatgaa gctactttt aatttgatg aacttttctt attttgggaa ggttgcgtg gtgggtggga aatatgatgt atttgttaca catagttttc tcattattta tgaacttaa ccatacagaa tgatataact cctgtgcaat gaagtgata acagtaaaag aagcgaggag aaaaaaaaa</p> <p>acagtaaaag aagcgaggag aaaaaaaaa</p>	Homo sapiens
				<p>SAQDQAPSVE VTDEDTVKRY FAKFEKFFQ P LQSSLDAQKE STGVTLRQR RKPVFHLSHE LNFTGFRKIL KKHDKILETS RGADWRVAHV RQKAMKRLRV PPLGAAQAPAWTTFRVGLF IYRGGFLIE FLFLGINTY GWRQAGVNHV LLACFFAPIS VIPTYVYPLA LYGFVFFLI FADFWLADQL NSLSVILMDL EYMICFYSLE VQCIPAWLRF IQCLRRYRDT KRAFPHLVNA FYLWIVFYII SSCYTLIWDL KMDWGLFDKN FAWTIQISIT STTLLPHSGD IIATVFAPLE VAPLNADDQT LLEQMDQDD GVRNRQKNRS DDEANT</p>	

425	40881	Lung Seven Transmembran e Receptor 2 (LJSTR2)	AX073578	<p>agagatggca gtgagcgaga ggagggggct cggcccgggg agccccggg agtgggggca A</p> <p>gcggtactt ctgggtctgc tgtgggtgg ctgtccggg cgcaccacc ggctggcgct sapiens</p> <p>gacgggggag aagcgagcgg acatccagct gaacagcttc ggttttaca ccaatggctc</p> <p>tctggaggtg gagttagcgg tcccgcggt gggcctcgg gaggcagaag agaagtcctt</p> <p>gctggggggg ttcaagtca gccgggttgc gtctggcaga gtctgtcctt attcaaccgg</p> <p>ggatttccag gactgacctc tccagaaaaa cagtagcagt ttctgggtcc tgttctctcat</p> <p>caacaccaag gatctgcagg tccaggtgcg gaagtatgga gacgagaaga cgttgtttat</p> <p>ctttcccggt ctcctccgg aagcaccctc caaacaccgg ctcgccagg cacaaggccac</p> <p>agtccccgc aaggtggatg gcggaggagc ctctgcagcc agcaagccca agtcaacacc</p> <p>cgcagtatt cagggtccta gtgggaagga caaggacctg gtgttgggctc tgagccacct</p> <p>caacaactcc tacaacttca gtttccacgt ggtgacggc tctcagcgg aagaaggcca</p> <p>gtacagcctg aacttccaca actgcaacaa ttcagtgcca ggaaggagc atccattcga</p> <p>catcacggtg atgacccgg agaagaacc cgatggcttc ctgtcgccag cggagatgcc</p> <p>ccttttcaag ctctacatgg tcatgtccgc ctgttctctg gccgtggca tcttctgggt</p> <p>gtccatcctc tgcaggaaca cgtacagcgt cttcaagatc cactggctca tggcggcctt</p> <p>ggccttcacc aagagcatct ctctcctctt ccacagcatc aactactact tcatcaacag</p> <p>ccaggggcac cccatcgaag gccttgccgt catgtactac atcgcacacc tgctgaaggg</p> <p>cgccctcctc ttcatacca tgcctctgat tggctcaggc tgggcttca tcaagtacgt</p> <p>cctgtcggat aaggagaaga aggtctttgg gatcgtgat cccatgcagg tccctggccaa</p> <p>cgtggcctac atcatcatcg agtcccgcga agtccatctg ctgtgtgtcc ccgtagtctg</p> <p>ggagattttg ttcctggtgg acctcatctg ctgtgtgtcc aggtggcag tgaacctggc</p> <p>gtccatccgg catctccagg atgcgtctgg cacagacggg aaggtggcag tgaacctggc</p> <p>caagctgaag ctgttccggc attactatgt catggctcatc tggtagctct acttcaccgg</p> <p>catcatcgcc atcctgtctg aggtggctgt cccctttcag tggcagtggc tgtaccagct</p> <p>cttgggtggg ggtccacccc tggccttctt cgtgctcag ggtacaagt tccagccccac</p> <p>agggaaacac ccgtacctgc agctgcccc aagggacag gaggatgttc agatggagca</p> <p>agtaatgacg gactctgggt tccgggaagg cctctccaaa gtcaacaaaa cagccagcgg</p> <p>gcgggaactg ttatgatcac ctccacatct cagaccaaa ggtcgtcttc cccagcatt</p> <p>tctcactcct gcccttctc cacagcgtat gtggggaggt ggagggggtc catgtggacc</p> <p>agggcccccag ctcgccggga ccccggttc cggacaagcc catttggaa gaggatccct</p> <p>tcctccccc aaatatggg cagccctgtc ctacccccg gaccacctt ccttccagc</p> <p>tatgtgtaca ataatagacca atctgtttg ct</p>	Homo sapiens
426	40881	Lung Seven Transmembran e Receptor 2 (LJSTR2)	CAC28410.1	<p>MAVSERRGLG RGSPAEWQR LLLVLLGGC SGRIHRLALT GEKRAIQLN SFGFYTNGL P</p> <p>EVELSVLRIG LRAEEKSLL VGFSLSRVRS GRVRSYSTRD FQDCPLQKNS SSFLVLFLIN sapiens</p> <p>TKDLQVQVRK YGEQKTLFIF PGLLPEAPSK PGLPKPQATV PRKVDGGGS AASKPKSTPA</p> <p>VIQPSGKDK DLVLGLSHLN NSYNFSFHV IGSAEEGQY SLNFHNCNNS VPGKEHPFDI</p> <p>TVMIREKNPD GFLSAAEMPL FKLYMMSAC FLAAGLFWS ILCRNTYSVE KIHWMALA</p> <p>FTKSISLLFH SINYFYFINSQ GHPIEGLAVM YYIAHLKGA LLFITIALIG SGWAFIKYVL</p> <p>SDKEKKVFGI VIPMQVLAVY AYIIIESREE GASDYVLWKE ILFLVDLIC GAILFPVWWS</p> <p>IRHLQDASGT DGKAVNLAKE LKLFRRHYVM VICVYFTRI IAILQVAVP FQWQWLYQLL</p> <p>VEGSTLAFFV LTGYKFKQPTG NNPLYQLPQE DEEDVQMEQV MTDGFRREGI SKVNKTASGR</p>	Homo sapiens

427	42697	G Protein-Coupled Receptor GPR64	NM_005756	ELL	Homo sapiens
				agccagcccg aggcgcgag cggcagggtg gcacagaggt tctccacttt gttttctgaa A	
				ctcgcggtca ggatgggttt cctgtccagg cagtgtggcc atgttggcag aactgaagaa	
				gttttactga cgttcaagat attccttgtc atcatttgtc ttcattgtcgt tctggtaaca	
				tccctggaag aagatactga taattccagt ttgtcaccac cacctgctaa attatctgtt	
				gtcagttttg cccctcctc caatgagggtt gaacaacaa gcctcaatga tgttacttta	
				agcttactcc cttcaaacga aacagaaaaa actaaaaatca ctatagtaaa aaccttcaat	
				gcttcaggcg tcaaacccca gagaaatata tgaattttgt catctatttg caatgactca	
				gcatttttta gaggtgagat catgttttcaa tatgataaaag aaagcactgt tccccagaat	
				caacatataa cgaatggcac cttaactgga gtctgtctc taagtgaatt aaaacgctca	
				gagctcaaca aaacctgca aacctaaagt gagacttact ttataatgtg tgctacagca	
				gaggcccaaa gcacattaaa ttgtacattc acaataaaac tgaataatac aatgaatgca	
				ttgtgtgcaa tagccgcttt ggaagagta aagattcgac caatggaaca ctgctgctgt	
				tctgtcagga taccctgccc ttctcccca gaagagtgg gaaagcttca gtgtgacctg	
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				caacccttt caccacagcc ttccctatg cccaaaccc atgtctcgg caccacact	
				ccacagtctg aaacgatctc ttcccctatg cctcccacc gtgtctgccc ctgcgaatgt caacactacc	
				cctgtgaaag cctcattttc cttcccagc agacatctc aacaccagca gtatttttga tcttgagaac	
				agcgacctc ctgtccagac agactctgtc ggctctgtcc ttgggcagcc cctgcgagga	
				caagtgttc agatggagaa ggctctgtcc cagactcctt catctcccgc ctgacatgct ggccctctg	
				gaaatgatca accaagtcaag agtggaagt agtggctac attggcctac agctgaact ttcaaacacg	
				gctcaaaagt tctgaaagt taacctccc ttctttggct ctggctgtga tcagagtga tgcagtagt	
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				ttcaacacaa ctacctttgt ggcccaagac cctgcaaatc ttcaggtttc tctggaacc	
				caagctcctg agaacagtat tggcacaatt actcttccct catcgtctgat gaataattta	
				ccagctcatg acatggagct agcttccagg gtctcagttca atttttttga aacacctgct	
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				ctcctggact cgtggattgc tctgtataag atgcaaggcc tctgcatctc agtggctgta	
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				tacctggccc ttgtcaaatg atttaatact tacatccgaa aatacatcct taaattctgc	
				attgtcgggt gggtgggtacc agctgtggtt gtgaccatca tcttgactat atccccagat	

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caactgggag ccagcgaaa aaccagtatt caagacctca ggagtatcgc tggccttaca
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aagctaatta agggcgatga ttattattac aagaagaaac caagacatta caccatgggt
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ctgacttgtc ttgcaatat tctttttctg atttatttaa ttttcttgta tttatatgtt
aaaaatcaaa atgttataat caatgaata aattgcagt taaga

428 42697 G Protein- NP_005747.1 MFVSVRQCQH VGRTEEVLLT FKIFLVILCL HVVLVTSLEE DTDNSSLSPK PAKLSVVSFA P Homo
Coupled PSSNEVETTS INDVTLSLLP SNETEKTKIT IVKTFNASGV KPQNICNLS SICNDSAFFR sapiens

[illegible]

310/448

430	45937	KIAA1624 Protein	AAK57695	<p>tggagtccgt tgtgacaaca tctggggtga tggaaagtat gaagaaagtc aagaagggtga caaacggctc cgtggagccc cagggcgagt gggaaggcgc cgtgtgacag agccgaccct gaggatggca ctgtccaagg aaactgttaa cttattcata gtctattgg acagcaggag cagctcctac agtgaactat tggcaccacc gacagtgaac ccagggcaca tggctggagc acagtgcgc ggaacacctga ttttgtactc tcttttatgg aaacgatctg tggctgttta gaggcagctg gatacctctt cagggcgga tgggaggcgc ggcacaggga gaggagagag aagagaaaag gaagaattca ttttaattt aggtttctt tttcttctt catttcggag ctctaaggtg tatgcagttg tgaccccatg tgtggggaag ttagcaagg acggtcgtg gagggggaag gaggtgcga ggtgtctgtc tgatgcttta ggaatgtct actgaggacc ctgggactta agaagaagg cggggagagt gccattgcct gtttgggaga caaaatgaa cgaaaacagg tgacttttga aagcaaaagc aaacccagt ttaggatgta gcacctgccc caggattcct gccctcggct ttgccccaga ccttattcc agatgctgag agtgaccagg acagcagctc ctgaggccca gtggtcttct ttccaacagg aaaagaaggc tgtgatgtcg ctgtcaggat catgccctgt ggcacagcac aggtggtggg aggtggtttt ctgactgaga tgttgcctga tggatggaaa gaaatgtatt ttttaagtca aaagcatta tccctgtggc ttgcctggac atccactccc tgacagccca gagcagcact gtctggtctt ccttcattgt tgtggccttg ttgtgttga tcagaatttt ggggaaatg gaaagtttt ctcaaggagc agctggggc agaataagta gtatttaagc aaataactaa gtccaagcaa atcatcccca ttaaaaagct tttcctgtag gctagtagga aaaaaaaa aaaaaa</p>	Homo sapiens
431	50847	Neurotensin Receptor type 2	NM_012344	<p>MAALAPVGSP ASRGPRLAAG LRLPLMLGLL QLLAEPGLGR VHHLAKDDV RHKVLNFTG P FFKDGVMVN VSSLNEPE DKDVTIGFSL DRTKNDGFSS YLDEDVNYCI LKKQSVSVTL LILDISRSEV RVKSPPEAGT QLPKIIFSRD EKVLGQSQEP NVNPEASAGNQ TQKTQDGGKS KRSTVDSKAM GEKSFVHNN GGAVSEQFF NISTDDQGL YSLYFHKCLG KELPSDKFTF SLDIEITEKN PDSYLSAGEI PLPKLYISMA FFFFLSGTIW IHLKRNRND VFKIHWLMAA LPFTKSLSLV FHAIDYHYS SQFPFIEGWA VVYIITHLLK GALLFITIAL IGTGWAFIKH ILSDKDKKIF MIVIPLOVLA NVAYIIEST EEGTTEYGLW KDSLFLVDLL CCGAILFPVV WSIRHLQEAS ATDGKAAINL AKLKLFRHY VLVICYIYFT RIIFLLKLA VPFQWKWLYQ LLEDETATLVE FVLTYGKFRP ASDNPYLQLS QEEEDLEMES VVTTSGVMES MKKVKKVTNG SVEPQGEWEG AV</p>	Homo sapiens
431	50847	Neurotensin Receptor type 2	NM_012344	<p>gagtgaagg gagggagcgc cggccgcggg agcgggatgg aaaccagcag cccgcggccc A ccgcggccc gctccaaccc ggggtgagc ctggagccc gctgggctgt ggacactcgc ctctgggcca agtgtctgtt caccgcgtc tacgactca tctgggcgtt gggcgcggcg ggcaatgcgc tgtccgtgca cgtggtgctg aagcgcgcg cgggcgcctg cgccaccacg tgctcagcct ggcgctcgc ggcctgctg tgcgtgctgt cggcgtgccc gtggagctct acagcttctg gtggttccac taccctggg tcttcggcga cctgggctgc cgcggtact acttcgtgca cgagctgtgc gcctacgcca cgggtgctgag cgtggcaggc ctgagcgccg agcgtgcct agcgtgtgc cagccccgc gtgccccag cctgctgacg ccacgccga cccggtggct ggtggcgctc tcgtgggccc cctcgtcctg cctcgcctg cccatggccg tcatcatggg gcagaagcac gaactcgaga cggcgggagc ggagccggag cccgccctgc gagtgtgcac ggtgctggtg agccgcaccg cgctccagt cttatccag gtgaatgtgc tgggtctctt cgtgctcccc ttggcactaa ctgcttctt gaatggggctc</p>	Homo sapiens

432	50847	Neurotensin Receptor type 2	NP_036476.1	<p>acagtgaacc accgtgtggc cctctgtctc caagtgcctg cactctctac cccggggcagc tccaccccc gccgcctgga gctgctgagt gagggagggtc tctcagctt catcgtatgg aagaagacct tttaccagg aggccagggtc agcctgggtga gacataaaga cgtgcgcgg atccgcagcc tccagcgcag cgtccagggt ctcagagcca tcgtgggtcat gtagtctac tgctggctgc cgtaccatgc ccgcaggctc atgtactgct acgtacctga tgacgcgtgg actgacccac tgtacaattt ctaccactac tctctctac aacgcctgt cctcctctt cagaaaaactc gtcagctcag ctgtgactcc cctgtgtgga gagcaccacc ccatgaagcg gttacccccg ttcctggaag ccgtcagctc cctgtgtgga aatgaacag acaagcaaa atgaccagct gcttagtcac aagccccaga gtcccacct aatggataca gcttcagggtc ttggggatcc ccagaaaaacc cggacctgaa tgtaaatgcaa gaatgaacag acaagcaaa atgaccagct gcttagtcac ctggcaaaag aggtgagcaa cctcatcact aatcattcaa gcttcgagc cagggcgact tctatcaacc cctgctctgc tgagaacct caagcgcagg gaagccacgt gaccctcct agcctcagc tcctcgtct gtgtagtgga gataaagaac agcaccatc tcttagtggt gctgagact aaagtgtcta gcacagaacc tgggtcgtag tagatgctca ataaattttt gctggcacg</p>	Homo sapiens
433	53440	G Protein- Coupled Receptor LS53440	AX107037	<p>RAGNAGRLRH HVLSLALAGL LLLLGVFVE LYSFVWFHYP WVFGLGCRG YYFVHELCA ATVLSVAGLS AERCLAVCQP LRARSLTTPR RTRWLVALSW AASLGLALPM AVIMGQKHEL ETADGEPEPA SRVCTVLVSR TALQVFIQVN VLVSFVLPLA LTAFLNGVTV SHLLALCSQV PSTSTPGSST PSRLELSEE GLLSFIVWKK TFIQGGQVSL VRHKDVRRIR SLQRSVQVLR AIVVMYVICW LPYHARLMY CYVPDDAWTD PLYNFHYFY MVTNLFYVS SAVTPLLYNA VSSFRKFLF EAVSSICGEH HPMKRLPPKP QSPTLMDTAS GFQDPPETRT</p>	Homo sapiens

gttaacattt	tggaagacag	tattcagaaa	aaaaatttcc	ttataaaaa	atacaactca
gatccttcaa	atatgaact	ggttgaggaa	tctccatttt	ttcaatatta	ttttcttctt
tggtttcttg	ctacataaa	ttattaatac	cctgactagg	ttgtggttgg	agggttatta
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attagtacct	tcattgtagc	catgggaaaa	ttgatgttca	tggggatca	gtgaattaaa
tggggtcata	caagtataaa	aattaaaaaa	aaaaaagact	tcatagcccc	tctcatatga
tgtaggaaga	ctgttagaga	gaccaacagg	gtagtgggtt	agagatttcc	agagtcttac
attttctaga	ggaggtattt	aatttcttct	cactcatcca	gtgttgtatt	taggaatttc
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aaaaataaag	actattgtgt	caagaaaaaa	aaaaaaaaaa	aaaaaaaaaa	aaaaaaaaaa
aaaaaaaaaa	aaaaaa				
MMVDPNGNES	SATYFILIGL	PGLEEAQFWL	APFLCSLYLI	AVLGNLTIIY	IVRTEHSLHE P
PMYIFLCMLS	GIDILISTSS	MPKMLAIFWE	NSTTIQFDAC	LLQMFHLSL	SGMESTVLLA
MAFDYVAIC	HPLRHATVLT	LPRVTKIGVA	AVVRGAALMA	PLPVFIKQLP	FCRSNILSHS
YCLHQDWMKL	ACDDIRVNWV	YGLIIVISAI	GLDSLLISFS	YLLILKTVLG	LTREAQAKAF
GTCVSHVCV	FIFYVPFIFGL	SMVHRSKRR	DSFLPVILAN	IYLLVPPVLN	PIVYGVKTKE
IRQRILRLFH	VATHASEP				

Homo
sapiens434 53440 G Protein-
Coupled
Receptor
LS53440 CAC38935.1

435	54053	Gaba (b) Receptor 2	NM_005458	atggcttccc	cgcggaagtc	cgggcagcca	ggggcgccgc	cgccgcgcgc	accgcgcgc	A	Homo sapiens
				gcgcgctgc	tactgtact	gctgtgccc	ctgtgtgtgc	ctctggcgcc	cgggcgctgg		
				ggctggggcg	ggggcgcccc	cgggcgccgc	cccgagcgcc	cgccgctctc	catcatgggc		
				ctcatggcg	tcaccaagga	ggtggccaa	ggcagcatcg	ggcgcggtgt	gtccccgc		
				gtggaactgg	ccatcgagca	gacccgcaac	gagtcactcc	tgcccccta	cttctctgac		
				ctcgcgctct	atgacacgga	gtgcgacaac	gcaaaaaggt	tgaagcctt	ctacgatgca		
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				gcaaaagtgt	tctgttgtgc	atacgaggag	aacatgtatg	gtagtaata	tcagtggatc		
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				cggcaccagc	ggatccagga	cttcaactac	acggaccaca	cgtctgggag	gatactctc		
				aatgccatga	acgagaccaa	cttcttcggg	gtcacgggtc	aagtgtatct	ccggaatggg		
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				gtcagcatcc	ccgcactcaa	cgacagcaag	tacatcgga	tgaagtgtcta	caacgtgggg		
				atcatgtgca	tcatcggggc	cgctgtctcc	ttcctgacct	gggaccagcc	caatgtgcag		
				ttctgcatcg	tggctctggt	catcatcttc	tgacgacca	tcacctctctg	cctgggtattc		
				gtgccgaagc	tcataccct	gagaacaaac	ccagatgcag	caacgcagaa	caggcgatttc		
				cagttcactc	agaatcagaa	gaaagaagat	tctaaaacgt	ccacctcggt	caccagtgtg		
				aaccaagcca	gcacatccg	cctggagggc	ctacagtcag	aaaacc			

[illegible]

438	55728	ETL protein NP_071442.1	MCVPGFRSSS NQDRFITNDG TVCIENVNAN CHLDNVCIAA NINKTLTKIR SIKEPVALLQ P	Homo sapiens
			EVYRNSVTDL SPTDIITYIE ILAESSLLG YKNNTISAKD TLSNSTLTFE VKTVNNFVQR	
			DTFVVDKLS VNHRRTHLTK LMHTVEQATL RISQSFQKTT EFDNSTDIA LKVFFFDSYN	
			MKHIHPHNM DGDYINIFPK RKAAYDSNG VAVAFLYYKS IGPLSSSDN FLLKPQNYDN	
			SEEEERVISS VISVSMSSNP PTLYELEKIT FTLSHRKVTD RYRSLCAFWN YSPDTMNGSW	
			SSEGCELTYS NETHTSCRN HLTHFAILMS SGPSIGIKDY NILTRITQLG IISLICLAI	
			CIFTWFFSE IQSTRTHHK NLCCSLFLAE LVFLVGINTN TNKLFCSIIA GLLHYFFLAA	
			FAWMCIEGIIH LYLIIVGVIIY NKGFLHKNFY IFGYLSPAVV VGESAALGYR YYGTTKVCWL	
			STENNFIIWSE IGPACLIILV NLLAFGVIIY KVFHRHTAGLK PEVSCFENIR SCARGALALL	
			FLLGTTWIFG VLHVWHASV TAYLFTVSNA FQGMFIFLFL CVLSRKIQEE YRFLKKNVPC	
			CFGCLR	
439	56923	Muscarinic acetylcholine Receptor M3 NM_000740	atgaccttgc acaataacag tacaacctgc cctttgtttc caaacatcag ctccctctgg A	Homo sapiens
			atacacagcc cctccgatgc agggctgccc ccgggaaccg tcaactattt cggcagctac	
			aatgtttctc gagcagctgg caatttctcc tctccagacg gtaccaccga tgaccctctg	
			ggaggtcata ccgtctggca agtgggtcttc atcgctttct taacgggcat cctggccttg	
			gtgacatca tcggcaacat cctgggtaatt gtgtcattta aggtcaacaa gcagctgaag	

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 tcagtgggta cagcttacct cttcacagtc agcaatgctt tccaggggat gttcattttt
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 gctgagaaat tgttgacata aaataaagaa ttgaagaac acattttacc atttgtgaa
 ttgttctgaa cttaaatgtc cactaaaaa acttagactt ctgtttgcta aatctgtttc
 ttttctaat attctaaaa

440	56923	Muscarinic acetylcholin e Receptor M3	NP_000731.1	acggtcaaca actacttcct cttaagcctg gcctgtgccc atctgattat cgggggtcatt tcaatgaatc tgtttacgac ctacatcac atgaatcgat gggccttagg gaacttggcc tgtgacctct ggcttgccat tgactacgta gccagcaatg cctctgttat gaacttctctg gtcatcagct ttgacagata cttttccatc acgagggcgc tcacgtaccg agccaaacga acaacaaaga gagcgggtgt gatgatcggg ctggcttggg tcctctctctt tgccttttgg gtccttgcca tcttggtctg gcaatacttt gttggaaga gaactgtgcc tccgggagag tgcttcattc agttcctcag tgagccacc attacttttg gcacagccat cgctgctttt tatatgcctg tcaccattat gactatttta tactggagga tctataagga aactgaaaag cgtaccaaaag agcttgctgg cctgcaagcc tctgggacag aggcagagac agaaaacttt gtccacccca cgggcagttc tcgaagctgc agcagttacg aacttcaaca gcaagcatg aaacgctcca acaggaggaa gtatggcgcg tgccacttct ggttcaaac caagagctgg aaacccagct ccgagcagat ggaccaagac cacagcagca gtgacagttg gaacaacaat gatgtgctg cctcctgga gaactccgac tctccgggac aggagggacat tggctccgag acgagagcca tctactccat cgtgctcaag cttccgggac acagcaccat cctcaactcc accaagtac cctcatcgga caacctgcag gtgctgagg aggagctggg gatggtggac ttggagagga aagccgacaa gctgcaggcc cagaagagcg tggacgatgg aggcagtttt ccaaaagct tctccaagct tcccatccag cttagagtcag ccgtggacac agctaagact tctgacgtca actcctcagt gggtaagagc acggccactc tacctctgtc cttcaaggaa gccactctgg ccaagagggt tgctctgaag accagaagtc agatcactaa gcggaaaagg atgtccctgg tcaaggagaa gaaagcgcc cagaccctca gtgcgatctt gcttgccttc atcatcactt ggaccccata caacatcatg gttctggtga acaccttttg tgacagctgc atacccaaaa ccttttggaa tctgggctac tggctgtgct acatcaacag caccgtgaac ccggtgtgct atgctctgtg caacaaaaca ttcagaacca ctttcaagat gctgctgctg tgccagtggtg acaaaaaaaa gaggcgcaag cagcagttacc agcagagaca gtccgtcatt tttcacaagc gcgcaccga gcaggccttg tag	Homo sapiens
441	57180	Leukotriene B4 Receptor BLTR2	NM_019839	GGHTVWQVWF IAFLTGILAL VTIIGNILVI VSEKVNKQLK TVNNYFLLSL ACADLIIGVI SMNLFTTYII MNRWALGNLA CDLWLAIIDYV ASNASVMNLL VISFDYFSI TRPLTYRAKR TTKRAGVMIG LAWVISFVLW APAILFWQYF VGKRTVPPE CFIQFLSEPT ITFGTAIAAF YMPVTIMTIL YWRIYKETEK RTKELAGLQA SGTEAETENF VHPTGSSRSC SSYELQQQSM KRSNRRKYGR CHFWFTTKSW KPSSEQMDQD HSSSDSWNNN DAAASLENSA SSDEEDIGSE TRAIYSIVLK LPGHSTILNS TKLPSSDNLQ VPHEELGMVD LERKADKLOA QKSVDDGGSF PKSFSKLPQ LESAVDTAKT SDVNSSVGKS TATPLSFKE ATLAKREALK TRSQITKRKR MSLVKEKKA QLSAILLAF IITWTPYNIM VLNTFCDSK IPKTFWNLGY WLCYINSTVN PVCYALCNKT FRTTFKMLL CQCDKKRRK QYQQRQSVI FHKRAPEQAL gaaactggcc ctggccctga accaaatacc tgaaccctc gtaaacctcca taccctgacc A cccttggtttt ggataatacc aggtagaaca actctctctc actgtctgtt gtgaggatac gctgtagccc actcattaa g tacattctcc taataaatgc ttgggactga tcacctgccc agtcttttgt cttgggcaat ctatactttt cccaaaggctt cccaaaggctt actgaaggga cttaacatac tcttaatggc ttctctctct ctgtttttac cttatgccct cacttcctga gttaacctcc caaatacagg atcacctgta cccaaaggcct tagctcaaga atacaggatc	Homo sapiens

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 TYQLTGGNTR NREALSSQRG GGLITLALPL DYKQEQYVL AVTASDGTHS HTAHLINVT
 DANTRHPVEQ SSHYTVSVE DRPVGTSIAT LSANDEDGGE NARITYYIQD PVPQFRIDPD
 SGTMYTMEL DYENQVAYTL TIMAQDNGIP QKSDTTTLEI LILDANDNAP QFLWDFYQGS
 IFEDAPPSTS ILQVSATDRD SGPNGRLLYT FQGGDDGDGD FYIEPTSGVI RTQRRLDREN
 VAVYNLWALA VDRGSETPLS ASVEIQVTIL DINDNAPMFE KDELELFVEE NNPVGSVVAK
 IRANDPDEGP NAQIMYQIVE GDMRHEFFQLD LINGDLRAMV ELDFEVREY VLVVQATSAP
 LVSRATVHIL LVDQNDNPPV LPDFQILENN YVTNKSNSFP TGVIGCIPAH DFDVSDSLNY
 TFFVQGNELRL LLLDPATGEL QLSRDLNDR PLEALMEVSU SDGIHSVTAF CTRLVITIITD
 DMLTNSITVR LENMSQEKFL SPLIALFVEG VAAVLSTTKD DVFVENVQND TDVSSNILNV
 TFSALLPGGV RGQFPSEDL QEQIYLNRTL LTTISTQRLV PFDDNICLRE PCENYMKCVS
 VLRFDSSAPF LSSTTVLFRP IHPINGLR CR CPPGFTGDC ETEIDLCCYS PCGANGRCRS
 REGGYTCECF EDTGHECEV DARSGRGANG VCKNGGTCVN LLIIGGFHCVC PPGEYERPYC
 EVTTRSFPPQ SEVTFRGLRQ REHFTISLTF ATQERNGLLL YNGRENEKHD FIALEIVDEQ
 VQLTFSAGET TTTVAPKVP S GVS DGRWHSV QVQYYNKPN GHGLPHGPS GEKMAVTVTD
 DCDTTMAVRE GKDIGNYS CA AQGTQTSKK SLDLTGPLLL GGVPNLPEDE PVHNRQFVGC
 MRNLSVDGKN VDMAGFIANN GTREGCAARR NFCDGRRRCN GGTCVNRWNM YLCECPLRFG
 KNCCEQAMPH PQLFSGESV SWSDLNIIIS VPWYLGIMFR TRKEDSVLME ATSGGPTSFR
 LQILNNYLQF EVSHGPS DVE SVMLSGLRVT DGEWHLLIE LKNVKEDSEM KHLVTMTLDY
 GMDQNKADIG GMLPGLTVRS VVVGASEDK VSVRRGRGFC MQGVRMGGTP TNVATLNNMN
 ALKVRVKDGC DVDDPCTSSP CPPNSRCHDA WEDYSCVCDK GYLGINCVDA CHLNPENMG
 ACVRSPGSPQ GYVCEGSPH YGPYCENKLD LPCPRGWGN PVCGPCCHAV SKGFDPPDCNK
 TNGQCQCKEN YYKLLAQDTC LPCDCFPHGS HSRTC DMTAG QACKPGVIG RQCNRCNPF
 AEVTTLGCEV IYNGCPKAFE AGIWPQTKF GQPAAVPCPK GSVGNVAVRHC SGEKWLPEE
 LFNCCTTISFV DLRAMNEKLS RNETQVDGAR ALQVLRLRS ATQHTGTLEG NDVRTAYQLL
 GHVLQHSWQ QGFDLAATQD ADFHEDVIHS GSALLAPATR AAWEQIQRSE GGTAQLLRL
 EGYFSNVARN VRRYLRPFV IVTANMILAV DIFDKFNFTG ARVPRFTIHF EEFPRELESS
 VSFPADEFER PEEKEGPLL R PAGRRITPQT TRPGPGTERE APISRRRRHP DDAGQFAVAL
 VIYRTLGQL LPERYDPPDR SLRLPHRPII NTPMVSTLVY SEGAPLPRPL ERPLVEFAL
 LEVEERTKPV CVFVNHSLAV GGTGGSARG CELLSNRTH VACQCSHTAS FAVLMDISRR
 ENGEVLPLKI VTYAAVSLSL AALLVAFVLL SLVRMLRSNL HSHKHLAVA LFLSQLVEVI
 GINQTEPF CTVVAILLHY IYMSTFAWTL VESLHVYRML TEVRNIDTGP MRFYVVVGWG
 IPAIVTGLAV GLDPQGYGNP DFCWLSLQDT LIWSFAGPIG AVIINTVTS VLSAKVSCQR
 KHYYGKKGI VSLRLTAFL LLLISATWLL GLLAVNRDAL SFHYLFAIFS GLQGPVLLF
 HCVLNQEVK HLKVLGGRK LHEDSATTR ATLLTRSLNC NTTFDGDGPD LRTDLGESTA
 SLDSIVRDEG IQKLGVSGL VRGSHGEPDA SLMPRSCKDP PGHSDSDSE LSLDEQSSSY
 ASSHSDSED DGVGAEEKWD PARGAVHSTP KGDAVANHP AGWPDQSLAE SDESDPSGKP
 RLKVKVSV ELHREEQGS RGEYPPDQES GGAARLASSQ PPEQRKGILK NKVTYPPPLT

445	74514	5-HT5A Receptor	NM_024012	<p>LTEQTLKGRL REKLADCEQS PTSSRTSSLG SGGPDCAITV KSPGREGRD HLNQVAMNVR</p> <p>TGSAQADGSD SEKP</p> <p>atggatttac cagtgaacac aacctctctt tccctctcca cccctctccc ttggagacc A</p> <p>aaccacagcc tcggcaaaaga cgacctgcgc ccagctcgc cctgtctctc ggtcttcgga</p> <p>gtgcttattc tcacctgtgt gggctttctg gtggcgga cgttcgctg gaacctgtg</p> <p>gtgctggcga ccatcctccg tgaacgacc ttccacgcg tgccccaca cctggtggca</p> <p>tcctatggcg tctcggtgt cctggtggcc gcgctggta tgcgctgag cctggtgcat</p> <p>gagctgtccg ggcgcgcgtg gcagctaggt cggaggtgt gccagcttg gatecgtgc</p> <p>gacgtgcttt gctgcacggc cagcatctgg aacgtgacg ccatagccct ggaccgctac</p> <p>tggtccatca cgcgccacat ggaatacacg ctccgaccc gcaagtgcgt ctccaaagtc</p> <p>atgacgcgc tcaactgggc actctcgcgt gtcactctc tggccccgt gctttttggc</p> <p>tggggagaga cgtactctga gggcagcgag gagtgcagg taagccgga gcttctctac</p> <p>gccgtgtct ccacgtagg cgccttctac ctgcgcctc gtgtgtgtc cttcgtgtac</p> <p>tggaagatct acaaggctgc caagtccgc gtgggtcca ggaagaccaa tagcgtctca</p> <p>cccatatccg aagctgtgga ggtgaaggac tctgccaaac agccccagat ggtgttcacg</p> <p>gtccgccacg ccacgtcac cttccagcca gaaggggaca cgtggcgga gcagaaggag</p> <p>cagcgggcgc cctcatggt gggcactctc attggcgtgt tctgtctctg ctggatcccc</p> <p>ttctttctca ccgagctcat cagtcctc cactccaac tcttcttta acccctgat ctatacggct</p> <p>agcatcttcc tgtggcttgg ctactccaac cgccttcaag aactctttt ctaggcaaca ctga</p> <p>ttcaacaaga actacaacag cgccttcaag aactctttt ctaggcaaca ctga</p>	Homo sapiens
446	74514	5-HT5A Receptor	NP_076917.1	<p>MDLPVNLTSE SLSTPSPLET NHSIGKDLR PSSPLLSVFG VLILTLGLF VAATFAWNL P</p> <p>VLATILVRT FHRVPHNLVA SMAVSDVIVA ALVMPLSLVH ELSGRWQLG RRLCQLWIAC</p> <p>DVLCTASIW NVTAIALDRY WSITRMEYT LRTRKCVSNV MIALTWALSA VISLAPLLFG</p> <p>WGELYSEGSE ECQVSREPSY AVFSTVGAFY LPLCVLIFY WKIYKAARF VGSRTNSVS</p> <p>PISEAVEVKD SAKQPMVFT VRHATVTFQ EGDWREKE QRAALMVGIL IGVFLCWIP</p> <p>FFLTELISPL CSCDIPAIWK SIFLWLGYSN SFFNPLIYTA FNKNYNSAFK NFFSRQH</p> <p>gtaatgcaga gataataaaa cttcttaggt ccatagtctt tataataatt taataaccta A</p> <p>aacatggtat acaaatctct ccaaacccaa taacataatt atagtttcaa aaagtctccc</p> <p>aaactttcaa gttagatttt attgctttga tgagtggctt taaatatgaa agtctttgcc</p> <p>tgtgaagggc aatccttttc ccgtggactg ggatctatag aaatacagaa atgtgcccag</p> <p>gggttcatct ccctaataac catcattcac atttctcaac ctccctaata accagccacc</p> <p>atgtgagaag gatccacagt tactgtttat gactataatt aactagtacc tgggactgggt</p> <p>cagtggagt ggttgcaacc tgatgtaag gatgtcaaac ttgtctcggc cctgttccc</p> <p>agccagtaag taattccctg gcctcggcc ataccccta atctgttca cgtgattatg</p> <p>acaggcagac agcacagtaa ataacactat atattaagaa accccaagc atagtatca</p> <p>atggtatata cccaacagca tcctaggaaat ggagagtctg tagcaagggc ctccaatgtg</p> <p>aaggtcaaca cagtactgt gatgcgtga ttccatttt gtaaaagcatg atctctgggtg</p> <p>gtcattttta tcttctaac ttattgaaa agtctcctgt ttggggggcc cgccccgggt</p> <p>cacagccaga ctgactcagt ttccctggga ggtcccgctc gagcccgctc ttccctccc</p> <p>tctgcccccc ccagccctc gccccacct cggcgcccg acatctgct gctcagctcc</p> <p>agacggcgcc cggacccccg ggcggggat ccagccaggt gggagccccg cagatgaggt</p>	Homo sapiens
447	81765	Thromboxane A2 Receptor	NM_001060		Homo sapiens

448	81765	Thromboxane A2 Receptor	NP_001051.1	<p> ctctgaaggt gtgcctgaac cagtgccagc ctgccctgtc tgcagcatcg gccgatggg gtggtgactg atccctcagg gctccggagc catgtgccc aacggcagtt cctggggccc ctgtttccgg ccacaaaaca ttaccctgga ggagagacgg ctgacgcct cgcctgggtt cgccgctcc ttctgcgtgg tgggctggc ctccaactg ctggccctga gcgtgctggc ggcgcgcg cgaggggggtt cgacacgcg ctctccttc ctacacttc tctgggctt cgctctcacc gacttctcgg ggtgctggt gacgggtacc atcgtggtg cccagcacgc cgcgctcttc gagtggcacg ccgtggaccc tggctgacct ctctgctgct tcatgggctg cgctcatgac ttcttcggcc tgtccccgt gctgctggg ccgcccattg cctcagagcg ctacctgggt atcacccgc ccttctcgc ccggcggtc gctcgcagc gccgcgctg ggccacgtg gggctggtgt gggcgccgc gctggcgctg ggcctgctgc cctgctggg cggtggctgc tacacctgc aatacccggt gctctggtgc tctcgtgctg tggcgccga gtccggggac gtggccttcg ggtgctctt ctccatgctg ggcggcctct cggtcgggt gtccttctcg ctgaacacgg tcagcgtggc caccctgtgc cagctctacc acgggcagga ggcgccccag cagcgtcccc gggactccga ggtggagatg atggctcagc tctggggat catggtggtg gccagcgtgt gttggctgct ccttctggtc ttcatggccc agacagtgt gcgaacccg cctgcccata gcccccggt ccacctggaa ccagatcctg gacccctgg tgtatctct gtccatctac ttgcgcgtgg ggcgtctcc ggcgtgctc gacccctgc agcaccgc caggtcgt gtcccgccg cccagctca cgcagcgtc cgggctgag taggaagtgg acagagcgc cctcccgcg ctttcccgcg agccttggc cctcggaca gccatctgc ctgttctgag gattcagggtg ctgggggtgc tggatggaca gtgggcatca gcagcagggt ttgggttga cccaatcca accgggggac cccaactcc tccctgatcc tttaccag cactctcct tctcgggccc cttttccca tccagagctc ccacccctc tctgctccc tcccaacccc aggaagggca tgcagacatt ggaagagggt cttgcatgct tattttttt tttagacgga gtcttgctct gtccccagg ctggagtga tggcgcaat ctacgtcac tgcaacctcc acctcccggt ttcaagcgt tctcctgct cagcctcctg agtagctgg actataggc cgcgccacca cgcccgcta attttggat ttttagtaga gacggggtt caccgtgtg gccaggctgg tctgaaactc ctgacctcag gtgattcacc agcctcagcc tccaaagt ctgggatcac aggcataaac caccacacct ggcattttt tttttttt tagacggagt ctcactctgt ggcacagcct ggagtacagt ggcacgatct cggctcactg caacctcgc ctccgggtt caagcattc tcgtgcctca gctcccgag gctcgggat tacaggcga agccactgc cgcgccctg catgctctt gacctgaat tggacctact tgcggggta cagtgcttc cttttgaacc tccaacaggg aagctctgt ccagaaagga ttgaatgtga aacggggga ccccttttc ttgcaaaat atatctctgc cttgggttt at </p>	Homo sapiens
				<p> SSFLTELCGL VTDFLGLLV TGTIVVSQHA ALFEHVAVDP GCRICRFMGV VMIFFGLSPL LLGAAMASER YLGITRPFSS PAVASQRRW ATVGLVWAAA LALGLPLLG VGRYTVQYPG SWCFLTLGAE SGDAFGLLF SMLGLSVGL SFLLNTVSA TLCHVYHGQE AAQQRPRDSE VENMAQLLGI MVVASVCWLP LLVFIAQTVL RNPPAMSPAG QLSRTTEKEL LIYLRVATWN QILDPTWYIL FRAVLRLRQ PRLESTRPSL SLQPQLTQRS GLQ </p>	

449	98519	Chemokine (C NM_005283 motif) XC Receptor 1 (CCXCR1)	atggagtcct caggcaaccc agagagcacc accctttttt actatgacct tcagagccag A ccgtgtgaga accaggcctg ggtctttgtt accctgcga ccaactgtcct, gtactgcctg gtgtttctcc ttagcctagt gggcaacagc ctggctcctgt gggctcctggg gaagtatgag agcctggagt ccttcaccaa catcttcac ctaaacctgt gccctcaga cctgggtgtc gcctgcttgt tgcctgtgtg gatctcccca taccactggg gctgggtgct gggagacttc ctctgcaaac tctcaatat gatcttctcc atcagcctct acagcagcat ctcttctctg accatcatga ccatccaccg ctacctgtcg gtatgagcc cccctctccac cctgcgcgtc cccaccctcc gctgccgggt gctggtgacc atggctgtgt gggtagccag cactcctgcc tccatcctcg acaccatctt ccacaagggt ctttctctcg gctgtgatta tccgaactc acgtggtaac tcaactccgt ctaccagcac aactcttct tctgctgtc cctggggatt atcctgttct gctacgtgga gatcctcagg accctgttcc gctcacgtc caagcgcgc caccgcacgg tcaagctcat cttcgccatc gtggtggcct acttctcag ctggggctcc tacaacttca cctgtttctt gcagacgtg ttctggacc agatcatccg gagctgcgag gccaaacagc agctagaata cgcctgtct atctgccga accctgcctt ctccactgc tgctttaacc cgtgtctcta tgtcttctgt ggggtcaagt tccgacaca cctgaacat gtctccggc agttctgtgt ctgccggctg caggcaccca gccagcctc gatccccac tccctcgtg ccttcgccta tgaggcgcc tcttctact ga 450	98519	Chemokine (C NP_005274.1 motif) XC Receptor 1 (CCXCR1)	MESSGNPEST TFFYYDLQSQ PCENQAWFEA TLATTVLYCL VFLLSLVGNS LVLWLVKYE P SLESITNIFI LNLCLDLVF ACLLPWISP YHWGWLVDG LCKLNMIFS ISLYSSIFFL TIMTIHRYLS VVSPISLRLV PTLRCRVLVT MAVWVASILS SILDITPHKV LSSGCDYSEL TWYLTSVYQH NLFFLLSLGI ILFCYVEILR TLFRRSRKRR HRTVKLIFAI WYFFLSWGP YNFTLFLOTL FRTQIIRSC AKQLEYALL ICRNLAFSHC CFNPVLYVEV GVKFRTLKH VLRQWFECRL QAPSPASIPH SPGAFAYEGA SFY	Homo sapiens
451	130108	G Protein- Coupled Receptor GPR75	NM_006794 gcgatggcga tgaatcctct agtcctgcat catccagagc ggcaggcgag ctgggggtccg A gactgcgaga tggagagagg gcgcgctgcg gcaccggca ggcctatctg tcttgggcct ctttgtcac atattgctca tctgtgagct gaggcctga ctaactgagt attttgggg agcagaagaa ggagacattt ctctccgaaa atgaactcaa caggccacct tcaggatgcc cccaatgcca cctcgtccca tgtgcctcac tcacaggaag gaaacagcac ctctctccag gagggtcttc aggatctcat ccacacagcc accttgggtga cctgtacttt tctactggcg gtcatcttct gcctgggttc ctatggcaac ttcattgtct tcttgcctt ctctgatcca gccttcagga aattcagaac caactttgat ttcattgacc tgaacctgtc ctctgtgac ctcttcattt gtggagtgc agcccccatg ttcaccttg tgtattctt cagctcagcc agtagtatcc cggatgcttt ctgcttact ttcacttca ccagttcagg ctctcatc atgtctctga agacagtggc agtgatcgcc ctgcaccggc tccgagtggg gttggggaaa cagcctaata gcacggcctc ctttccctgc accgtactcc taccctgtc tctctggcc accagtttca ccttggccac cttggctacc ttgaaaacca gcaagtccca cctctgtctt cccatgtcca gctgattgc tggaaaaagg aaagccattt tgtctctcta tgtggtcgac ttcaccttct gtgtgtgtgt ggtctctgtc tcttatca tgaattgtca gacctgcg aagaacgctc aagtcagaaa gtgccccctt gtaatacacag tccagtgtc cagaccacag cctttcatgg ggtccctgt gcaggagggt ggagatccca tccagtgtc catgccggct ctgtatagga accagaatta caacaaactg cagcacgttc agaccctgg atataccaag	Homo sapiens			

452	130108	G Protein- Coupled Receptor GPR75	NP_006785.1	<p> agtcccaacc aactgggtcac ccctgcagca agcgcactcc agctcgtatc agccatcaac ctctccactg ccaaggattc caaagccgtg gtcacctgtg tgatcattgt gctgtcagtc ctggtgtgct gtcttccact ggggatttcc ttggtacagg tggttctctc cagcaatggg agcttcattc ttaccagtt tgaattgttt ggattactc ttatatcttc caagtcagga ttaaaccttt ttatatattc tcggaacagt gcagggctga gaaggaaagt gctctgggtgc ctccaataca taggcctggg ttttttctgc tgaacaacaa agactcgact tcgagccatg ggaataaggga acctggaagt caacagaaac aaatctctcc atcatgaaac aaactctgcc tacatgttat ctccaaagcc acagaagaaa ttgttgagcc aggcctgttg cccaagtcat tcaaaagaaa gtatgtgtgag tcccaagatc ttgctggagc atcaaacatg tggtcagagc agctcgaccc ccatacaac tcggattgaa ccttactaca gcattctata cagcagccct tccaggagg agagcagccc atgtaactta cagccagtaa actcttttgg atttgccaat tcatatatgg ccatgcatta tcacaccact aatgacttag tgcaggaata tgacagcact tcagccaagc agattccagt cccctcgtt taaagtcagt gaggctatag gatcttatgt aaacagtttt tgtttctgat agtaatggac ttatttctaa ctgagatca gtggcggatc aaaacctaca agattcaact gaaaagtgg cagttatggt ttctcttcat ctgatgtgtc agtatctgtt gatttgcttt gtagtttgtt gacatcttaa gatttgatgt gaaagtttta gattttttac cctg </p>	Homo sapiens
453	133117	G Protein- Coupled Receptor RAIG1	NM_003979	<p> FIVELSFFDP AFRKERTNFD FMILNLSFCD LFICGVTPAM FTFVLFSSA SSIPDAFCFT FHLTSSGFII MSLKTAVIA LHRLRMVLGK QNRTASFPC TVLLTLLLWA TSFTLATIAT LKTSKSHLCL PMSLIAGKG KAILSLYVD FTFCAVWSV SYIMIAQTLR KNAQVRKCP VITVDASRPQ PFMGVVPQGG GDPIQCAMPA LYRNQYNKL QHVQTRGYTK SPNQLVTPAA SRLQLVSAIN LSTAKDSKAV VTCVIIIVLSV LVCCPLGLIS LVQVVLSSNG SFILYQFELF GFTLIFKSG LNPFIYSRNS AGLRRKVLWC LQYIGLGFCC CKQKRLRAM GKNLEVNRN KSSHETNSA YMLSPKPQKK FVDQACGPH SKESMVSPKI SAGHQHCQS SSTPINTRIE PYYSIYNSSP SQEESPCNL QPVNSEGFAN SYIAMHYHTT NDLVQYDST SAKQIPVPSV ataacagcat gaagtgcgt ggaactgaa taggcgtgtc ctctccctcg accctcccc A tcttgtccc tctgtcacc cctcgtcgt tccctccctc cggcgagggc cgcctttata acaactgctc agatgcgag ggcgggag ctgtccaagg tctccccag cactgaggag ctgcctgct gccctctgc gcgcgggaag cagcaccaag ttcaaggcca acgccttggc actagggtcc agaattgcta caacagtccc tgatgggtgc cgcaatggcc tgaatccaa gtactacaga ctttgtgata aggcctgagc ttggggcatc gtccatgaaa cgggtggccac agccggggtt gtgacctcgg tggccttcat cctcactctc ccgatcctcg tctgcaaggt gcaggactcc aacaggcgaa aaatgctgcc tactactctt ctcttctcc tgggtgtgtt gggcatcttt ggcctcacct tcgccttcat catcgagactg gacggagaca cagggccac acgcttcttc ctctttgga tctcttttc catctgttc tccgtcctgc tggctcatgc tgtcagctcg accaagctcg tccgggggag gaagccctt tccctgttg tgattctggg tctggccgtg ggcctcagcc tagtccagga tgttatcgct attgaatata ttgtcctgac catgaatagg accaagctca atgtcttttc tgagcttcc gctcctcgtc gcaatgaaga ctttgcctc ctgctcacct acgtcctctt cttagtggtg ctagccttcc tcatgtctc cttcaccttc tgtgttctt tcacggggtc gaagagacat ggggccca tctacctcac </p>	Homo sapiens

454	133117 G Protein- Coupled Receptor RAIG1	NP_003970.1	gatgtctctc tccattgcca tctgggtggc ctggatcacc ctgctcatgc ttctgactt tgaccgcagg tgggatgaca ccatcctcag ctccgccttg gctgccaatg gctgggtgtt cctgttggt tatgttagtc ccgagttttg gctgctcaca aagcaacgaa accccatgga ttatcctgtt gaggatgctt tctgtaaacc tcaactctg aagaagagct atggtgtgga gaacagagcc tacttcaag aggaatcac tcaaggtttt gaagagacag gggacacgct ctatgcccc tattccacac attttcagct gcagaaccag cctcccaaa aggaattctc catccacagg gccacgctt ggcgagccc ttacaaagac tatgaagtaa agaaagaggg cagttaactc tgtcctgaag agtgggaaa atgcagccg gcggcagatc tagcgggagc tcaaagggat gtggcgaaa tcttgagtct tctgagaaa ctgtacaga cactacgga acagtttgcc tccctccag cctcaaccac aattcttcca tgcggggct gatgtggct agtaagactc cagttcttag aggcgctgta gtattttttt ttttttgtct cacccttg atacttcttt taagtgggag tctcaggcaa ctcaagtta gaccttact ctttttgtt gttttttgaa acaggatctt gctctgtcac ccaggcttga gtgcagtgtt gcgacacag ccagtgagc cctcgaccac ctgtgctcaa gcaatcctcc catctccatc tcccaaatg ctgggatgac agcgtgagc cacagctccc agcctaggcc cttaatcttg ctgttattt ccatggacta aaggtctgtt catctgagct cagctggct cacacagctc taggggctg ctcctctaac tcacagtgg ttttgtgagg ctctgtggcc cagagcagac ctgcatact gagcaaaaat agcaaaagcc tctctcagcc cactggcctg aatctacact ggaagccaa ttgtctggc cccgctccc caaccttct tgcctgggta ggagaggcta aagatcacc taaatctact catctctcta gtctgcctc acattgggctc tcagcagctc cccagcacca attcacaggt caccctctc ttcttgact ttccagaaac ttgctgtcaa ttccgagatc taatctccc ctacgctctg ccaggaattc ttccagacct cactagcaca agcccggtg ctccttgta ggagaattg tagatactc tcaactcaaa ttccgtgggc tgatacttct ctcatcttg acccaacct ctgtaaatag atttaccgca ttacggctg cattctgtaa gtgggcagtg tctcctaag gaggaagtgt cattgtataa taagtattc acctgagtat gcaataaaga tgtgtggcc actcttctc ggtggtggca gcaaaaaaa aaaaa MATTPDCCR NGLSKYYRL CDKAEAWGIV LETVATAGV TSVAFMLTLP ILVCKVQDSN P RRKMLPTQFL FLGLVIGIFG LTFAFIIGLD GSTGPTREFL FGILFISICFS CLLAHAVSLT KIVRGRKPLS LLVILGLAVG FSLVQDVIAI EYIVLTNRT NVNVFSELSA PRNEDFVLL LTYVLFMAL TFLMSSFTFC GSFTGWKRHG AHYILTMLLS IAIWVAWITL LMLPDFDRRW DDTILSSALA ANGWVFLAY VSPEFWLLTK QRNPMDYVPE DAFCKPQLVK KSYGVENRAY SQEEITQGE ETGDTLYAPY STHFQLQNP PQKEFSIPRA HAWPSPYKDY EVKKEGS atggggacct gtgacattgt gactgaagcc aatatctcat ctgcccctga gagcaacacc A acgggcatca cagcctctc catgcccagc tggcagctgg cactgtggc accagcctac ctggccctgg tgcgtggc cgtgacgggt aatgccatcg tcatctggat catcctggcc catcggagga tgcgcacagt caccaactac ttcatcgta atctggcgt ggctgacctc tgcatggctg cctcaatgc cgccttcaac ttgtctatg ccagcccaa catctggtag tttggccgtg cctctgcta cttccagaac ctcttccca tcacagccat gtttgtcagc atctactcca tgaccgcat tgcgtccgac aggtacatgg ccatcgcca cccctccag cctcggcttt cagctccag caccaaggcg gttattgtg ccatctggct ggtggctctc gccctggcct cccctcagtg cttctactcc accgtcacca tggaccaggg tgccaccaag	Homo sapiens
455	152198 Tachykinin Receptor 2	NM_001057	atggggacct gtgacattgt gactgaagcc aatatctcat ctgcccctga gagcaacacc A acgggcatca cagcctctc catgcccagc tggcagctgg cactgtggc accagcctac ctggccctgg tgcgtggc cgtgacgggt aatgccatcg tcatctggat catcctggcc catcggagga tgcgcacagt caccaactac ttcatcgta atctggcgt ggctgacctc tgcatggctg cctcaatgc cgccttcaac ttgtctatg ccagcccaa catctggtag tttggccgtg cctctgcta cttccagaac ctcttccca tcacagccat gtttgtcagc atctactcca tgaccgcat tgcgtccgac aggtacatgg ccatcgcca cccctccag cctcggcttt cagctccag caccaaggcg gttattgtg ccatctggct ggtggctctc gccctggcct cccctcagtg cttctactcc accgtcacca tggaccaggg tgccaccaag	Homo sapiens

Homo
sapiens

456 152198 Tachykinin NP_001048.1
Receptor 2
HRRMRTVTNY FIVNLALADL CMAAFNAAFN FVYASHNIWY FGRFCYFQN LFPITAMFVS
IYSMTAIAAD RYMAIVHPFQ PRLSAPSTKA VIAGIWLVAL ALASPOCFYS TVTMDQGATK
CVVWPEDSG GKTLLLYHLV VIALIYFLPL AVNFVAYSVI GLTLWRRVAVP GHQAHGANLR
HLQAKKKFKV TMVLVVLTEA ICWLPYHLIF ILGSFQEDII CHKFIQQVYL ALFWLAMSSST
MYPNIIYCCL NHRFRSGFRL AFRCCPWVTP TKEDKLELTP TTSLSTRVNR CHTKETLFMA
GDTAPSEATS GEAGRPQDGS GLWFGYGLLA PTKTHVEI

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sapiens

457 152201 Thyrotropin NM_000369
Receptor
ccgctcccg gctctctttt ggcctggggt aaccgaggt gcagagctga gaatgaggcg A
atttcggagg atggagaat agccccgagt cccgtggaaa atgaggcccg cggacttgct
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gcacctgaag gaactgatag caagaaacac ctggactctt aagaaacttc cactttcctt
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caccatattg ggggacagtg aagacatggt gtgtaccccc aagtccgatg agtcaaccc
gtgtgaagac ataattgggt acaagttcct gagaatttg gtgtgggttcg ttagtctgct

458	152201	Thyrotropin Receptor	NP_000360.1	<p> ggctctctg ggcaatgtct ttgtctctgct tattctctc accagccact acaactgaa cgccccgc tttctcatgt gcaactggc ctttgcggat ttctgcatg ggatgtacct gctctcatc gcctctgtag acctctacac tactctgag tactacaacc atgccatcga ctggcagaca ggcctctgggt gcaacacggc tggttcttc actgtctttg caagcgagt atcggtgat acgctgacgg tcatcacct ggagcgtgg tatgccatca cctcgccat ggcctggac cggaagatcc gcctcaggca cgcattgccc atcatggttg gggcctgggt ttgtgcttc cttctcgccc tgcttctttt ggtgggaata agtagctatg ccaagtcag tatctgctg cccatggaca cggagaccc tctgtctctg gcatatattg ttttggttct gacgtcaac atagttgctt tcgtcatcgt ctgctgctgt catgtgaaga tctacatcac agtcgaaat cgcagtaga acccagggga caaagatacc aaattgcca agaggatggc tgtgtgatc ttaccgact tcataatgcat ggcaccaatc tcattctatg ctctgtcagc aatctgaac aagcctctca tcaatgttag caactccaaa atctgtctgg tactcttcta tccactaac tctgtgcca atccattctt ctatgctatt ttcaccaagg cttccagag ggatgtgtc atctactca gcaagtttgg catctgtaaa cgcaggctc aggcataccg ggggcagagg gtctctccaa agaacagcac tgatattcag gttcaaaagg ttaccacga catgaggcag ggtctccaca acatggaaga tgtctatgaa ctgattgaaa actcccatct aaccctaaag aagcaaggcc aaatctcaga agagtatatg caaacggtt tgtaagttaa cactacacta ctcaaatgg taggggaact tacaataaa tagtttcttg aatagcatt ccaatcccat </p>	Homo sapiens
459	152245	C-C Chemokine Receptor 2	NM_000648	<p> MRPADLLQLV LLLDLPRDLG GMGSSPCE CHQEEDFRVT CKDIQRIPLS PPSTQTLKLI P ETHLRTIPSH AFSNLPNISR IYVSIDVTLQ QLESHSFYNL SKVTHIEIRN TRNLTYIDPD ALKELPLLKF LGIFNTGLKM FPDLTKVYST DFFILEITD NPYMTSIPVN AFQGLCNETL TLKLYNNGFT SVQGYAFNGT KLDVYLKN KKLPLSLSEL HLTRADLSYP SHCCAFKNQK LDVSQTSVTA LPSKGLEHLK ELIARNWTWL KKLPLSLSEL HLTRADLSYP SHCCAFKNQK KIRGILESML CNESMSQSLR QRKSVNALNS PLHQEYEENL GDSIVGYKEK SKFQDTHNNA HYYVFFEEQE DEIIGFGQEL KNPQEEETLQA FDSHYDYTIC GSEDNVCTP KSDEFNPCED IMGYKFLRIV VWFVSLALL GNVFVLLILL TSHYKLNVRP FLNCLAFAD FCMGYLLLI ASVDLYTHSE YYNHAIDWQT GPGCNTAGFF TVFASELSVY TLVTITLERW YAITEFAMRLD RKIRLRHACA INVGGWVCCF LLALLPLVGI SSYAKVSIOL PMDTETPLAL AYIVFVLIN IVAFVIVCCC HVKIYITVRN PQYNPGDKDT KIARMAVLI FTDFICMAPI SFYALSAILN KPLITVSNK ILLVLFYPLN SCANPFLYAI FTKAFQRDVF ILLSKFGICK RQAQAYRGQR VPPKNSTDIO VQKVTHDMRQ GLHNMEDVYE LIENSHLTPK KQGISEEYM QTVL caggactgcc tgagacaagc cacaagctga acagagaaaag tggattgaac aaggacgcat A ttccccagta catcacaac atgtgttcca catctcgttc tcggtttatc agaaatacca acgagagcgg tgaagaaagt accactttt ttgattatga ttacgggtgct ccctgtcata aattgacgt gaagcaaat ggggcccac tcctgctcc gctctactcg ctggtgttca tctttggttt tgtgggcaac atgtgtgtcg tcctcatctt aataaactgc aaaaagctga agtgttgac tgacatttac ctgctcaacc tggccatctc tgatctgctt ttcttatta ctctccatt gtgggctcac tctgtgcaa atgagtggtt ctttgggaat gcaatgtgca aattattcac agggctgtat cacatcggtt attttgggg aatcttctc atcatcctcc tgacaatcga tagatacctg gctattgtcc atgctgtgtt tgcttataaa gccaggacgg </p>	Homo sapiens

460	152245 C-C Chemokine Receptor 2	NP_000639.1	<p> tcaaccttgg ggtggtgaca agtgtgatca cctggttgggt ggctgtgttt gcttctgtcc caggaatcat ctttactaaa tgccagaaaag aagattctgt ttatgtctgt ggcccttatt ttccacgagg atggaataat ttccacacaa taatgaggaa cattttgggg ctggtcctgc cgctgctcat catggtcatc tgctactcgg gaatcctgaa aacctgctt cggtgtcgaa acgagaagaa gaggcatagg gcagtgagag tcatcttcac catcatgatt gtttactttc tctctggac tccctataac attgtcattc tctgaacac cttccaggaa ttcttcggcc tgagtaactg tgaagcacc agtcaactgg accaagccac gcaggtgaca gagactcttg ggatgactca ctgctgcac aatcccatca tctatgcctt cgttggggag aagttcagaa ggtatctctc ggtgttcttc cgaagcaca tcaccaagcg cttctgcaa caatgtccag ttttctacag ggagacagtg gatggagtga cttcaacaaa cagccttcc actggggagc aggaagtctc ggtggttta taaacgagg agcagtttga ttgtgttta taaagggaga taacaacttg tatataacaa caaacttcaa ggttttgggt aacaatagaa acctgtaaag caggtgcccc ggaacctcag ggctgtgtgt actaatcac actatgtcac ccaatgcata tccaacatgt gctcagggaa taatccagaa aaactgtggg tagagacttt gactctccag aaagctcatc tcagctcctg aaaaatgcct cattaccttg tgctaactct ctttttctag tcttcataat ttcttcactc aatctctgat tctgtcaatg tcttgaatc aagggccagc tggagggtgaa gaagagaatg tgacaggcac agatgaatgg gagtgaggga tagtggggtc agggctgaga ggagaaggag ggagacatga gcatggctga gcctggacaa agacaaaggt gagcaaaagg ctcacgcatt cagccaggag atgatactgg tccttagccc catctgccac gtgtatttaa ccttgaaggg ttcaccagggt cagggagagt ttgggaactg caataaacctg ggagttttgg tggagtcoga tgattctctt ttgcataagt gcatgacata tttttgcttt attacagttt atctatggca cccatgcacc ttacatttga aatctatgaa atatcatgct ccattgttca gatgttctt aggccacatc cccctgtcta aaaattcaga aaatttttgt ttataaaga tgcattatct atgatatgct aatataatga tatgcaatat aaaatttag MLVVLILNC KKLKCLTDIY LNLAISDL AIVHAVFALK ARTVTFGVV SVITWLVAVF ASVPGIIFTK HIGYFGGIF IILLTIDRYL FHTIMRNILG LVLPLLMVI CYSGLKTL RCRNEKKRHR CQKEDSVVVC GPYFPRGWN IVILNFTFQE FFLSNCEST SQLDQATQVT ETLGMTHCCI AVRVIFTIMI VYFLFWTPYN FHTIMRNILG LVLPLLMVI CYSGLKTL RCRNEKKRHR NPIIYAFVGE KFRRYLSVFF RKHITKRFCK QCPVFYRET DGVTSNTPS TGEQEVSAGL CAGAAATCCT CAGGTCCAC AGAAATGAAC ACGTTTCTA AAATAAGTC AAGCCAAGCT A GTCTTACCCC AAAGAAAATC CTAGCAAGCA AAGGTGGCTT CCTTCTCTGAG GCCCCAGCCA GGTGTGTCCA ACCGTAGGAG CCACAGCTCA GAGATCAGAG TGACTTAACA GTTAGAGGGC ACTTGATGAG TAAGTGAAA TAGGGAACC AAGTCAGAG ACACCTCCCT TCTGAGTCCC AACCATGTCT ACATCTGGAG AAGAACAGTT AAGTCAAGG ATCACAGACT TGTGATTAGA GACTGCCAGG GTCCATATGA CCAAGCGGG GTCCCAGGTG TGAAGCTGGG GTTGAGGATC CATTATCTGA ATTTTCCACT CTATGGATGA TCACTTTTAT TCTTTTCTT TTCTTGAATT TATTTCCATT TGTATTATCC TAAATTCCT GGTAGATCAC CTGTGAAAGC TTGCAACTGT CTGATAAGAA TAAAGGGGA AGGATTTGAC TTTACAGCAG AGACTTCAGA AGGAGTCTC TCTAGGAGCA AATTGGGGC AATCCAGTGG GAAGAGGTG GAAGACTGCA CTTGAGCTGC GTTTGGACAA CAGGCACACA ATCTTTACTT ACTTTTCAGG CTGCTTTGAG GT </p>	Homo sapiens
461	152299 Interleukin-8 Receptor A	LG5459	<p> tcaaccttgg ggtggtgaca agtgtgatca cctggttgggt ggctgtgttt gcttctgtcc caggaatcat ctttactaaa tgccagaaaag aagattctgt ttatgtctgt ggcccttatt ttccacgagg atggaataat ttccacacaa taatgaggaa cattttgggg ctggtcctgc cgctgctcat catggtcatc tgctactcgg gaatcctgaa aacctgctt cggtgtcgaa acgagaagaa gaggcatagg gcagtgagag tcatcttcac catcatgatt gtttactttc tctctggac tccctataac attgtcattc tctgaacac cttccaggaa ttcttcggcc tgagtaactg tgaagcacc agtcaactgg accaagccac gcaggtgaca gagactcttg ggatgactca ctgctgcac aatcccatca tctatgcctt cgttggggag aagttcagaa ggtatctctc ggtgttcttc cgaagcaca tcaccaagcg cttctgcaa caatgtccag ttttctacag ggagacagtg gatggagtga cttcaacaaa cagccttcc actggggagc aggaagtctc ggtggttta taaacgagg agcagtttga ttgtgttta taaagggaga taacaacttg tatataacaa caaacttcaa ggttttgggt aacaatagaa acctgtaaag caggtgcccc ggaacctcag ggctgtgtgt actaatcac actatgtcac ccaatgcata tccaacatgt gctcagggaa taatccagaa aaactgtggg tagagacttt gactctccag aaagctcatc tcagctcctg aaaaatgcct cattaccttg tgctaactct ctttttctag tcttcataat ttcttcactc aatctctgat tctgtcaatg tcttgaatc aagggccagc tggagggtgaa gaagagaatg tgacaggcac agatgaatgg gagtgaggga tagtggggtc agggctgaga ggagaaggag ggagacatga gcatggctga gcctggacaa agacaaaggt gagcaaaagg ctcacgcatt cagccaggag atgatactgg tccttagccc catctgccac gtgtatttaa ccttgaaggg ttcaccagggt cagggagagt ttgggaactg caataaacctg ggagttttgg tggagtcoga tgattctctt ttgcataagt gcatgacata tttttgcttt attacagttt atctatggca cccatgcacc ttacatttga aatctatgaa atatcatgct ccattgttca gatgttctt aggccacatc cccctgtcta aaaattcaga aaatttttgt ttataaaga tgcattatct atgatatgct aatataatga tatgcaatat aaaatttag MLVVLILNC KKLKCLTDIY LNLAISDL AIVHAVFALK ARTVTFGVV SVITWLVAVF ASVPGIIFTK HIGYFGGIF IILLTIDRYL FHTIMRNILG LVLPLLMVI CYSGLKTL RCRNEKKRHR CQKEDSVVVC GPYFPRGWN IVILNFTFQE FFLSNCEST SQLDQATQVT ETLGMTHCCI AVRVIFTIMI VYFLFWTPYN FHTIMRNILG LVLPLLMVI CYSGLKTL RCRNEKKRHR NPIIYAFVGE KFRRYLSVFF RKHITKRFCK QCPVFYRET DGVTSNTPS TGEQEVSAGL CAGAAATCCT CAGGTCCAC AGAAATGAAC ACGTTTCTA AAATAAGTC AAGCCAAGCT A GTCTTACCCC AAAGAAAATC CTAGCAAGCA AAGGTGGCTT CCTTCTCTGAG GCCCCAGCCA GGTGTGTCCA ACCGTAGGAG CCACAGCTCA GAGATCAGAG TGACTTAACA GTTAGAGGGC ACTTGATGAG TAAGTGAAA TAGGGAACC AAGTCAGAG ACACCTCCCT TCTGAGTCCC AACCATGTCT ACATCTGGAG AAGAACAGTT AAGTCAAGG ATCACAGACT TGTGATTAGA GACTGCCAGG GTCCATATGA CCAAGCGGG GTCCCAGGTG TGAAGCTGGG GTTGAGGATC CATTATCTGA ATTTTCCACT CTATGGATGA TCACTTTTAT TCTTTTCTT TTCTTGAATT TATTTCCATT TGTATTATCC TAAATTCCT GGTAGATCAC CTGTGAAAGC TTGCAACTGT CTGATAAGAA TAAAGGGGA AGGATTTGAC TTTACAGCAG AGACTTCAGA AGGAGTCTC TCTAGGAGCA AATTGGGGC AATCCAGTGG GAAGAGGTG GAAGACTGCA CTTGAGCTGC GTTTGGACAA CAGGCACACA ATCTTTACTT ACTTTTCAGG CTGCTTTGAG GT </p>	Homo sapiens

462 152299 Interleukin-8 Receptor A NM_000634

agctgttaag tcactctgat ctctgactgc agtctctact gttggacaca cctggccggt A
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467 159152 G Protein-
Coupled
Receptor
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472	160055 Motilin Receptor (GPR38)	NM_001507	<p>atgggcagcc cctggaacgg cagcgacggc cccgaggggg cgcgtggccc A gcgctgcgc cttggagca cgcgcgtgc tgcccttct cctgggggc gctggtgcg gtgaccgctg tgtgctgtg cctgttctg ctcgggggtga gcggcaacgt ggtgaccgtg atgctgatcg ggcgtaccg ggacatgagg accaccacca acttgtacct gggcagcatg gccgtgtccg acctactcat cctgctcgg ctcgcgttgc acctgtaccg cctctggcg tcgcgccct ggtgttctg gccgtgctc tgccgctgt cctctacgt gggcgagggc tgacactacg ccacgtgct gcacatgacc gcgctcagc tcgagcgcta cctggccatc tgccgcccgc tccgcccgc cgtcttggt acccgccgc gcgtccgcg ctcacatcgt gtgctctggg ccgtggcgt gctctctgc ggtcccttct tgttcttggg gggcgtcag caggacccc gcattctcgt agtcccggc ctcaatggca ccgcgcgat cgcctcctg cctctcgcct cgtcgcgc cctctggctc tgccggggc caccgcgtc cccgcccgtg gggcccaga ccgcggagg cgcggcgctg ttcagccgc aatgcggcc gagccccg cagctggcg cgtggtgt catgctgtg gtcaccacc cctacttct cctgcccctt ctgtgctca gcatctcta cgggctcgc ggccgggagc tgtggagcag ccggcgccg ctgcgagcc cggccgctc ggggcgagg agagccacc ggacagacc cgcgctcctg ctggtggtg ttctggcatt tataattgc tgggtgctc tccacgttg cagaatcatt tacataaaca cggaaattc gcgatgatg tacttctc agtactttaa catcgtcgt</p>	Homo sapiens

473	160055	Motilin Receptor (GPR38)	NP_001498.1	ctgcaacttt tctatctgag cgcattctatc aaccaatcc tctacaacct catttcaaag aagtacagag cggcgccctt taaactgctg ctgcaagga agtccaggcc gagaggcttc cacagaagca gggacactgc ggggaagtt gcaggagga cagggtgggc tacacgaga caagcgctaa cgtgaagacg atgggataa MLIGRYRDMR TTTNLYLGM AVSDLLILG LPFDLYRLMR SRPWVFGPLL CRISLYVGE CTYATLLHMT ALSVERYLAI CRPLRARVLV TRRRVRALIA VLMAVALLSA GPFLELVGE QDPGISVVPG INGTARIASS PLASSPPLWL SRAPPSPPS GPETAEEAAL FSRECRPSA QLGALRWMLW VTTAYFFLPF LCLSLYGLI GRELWSSRRP LRGPAAASGRE RGHRTQTVRL LVVLAFLIC WLPFHVGRII YINTEDSRMM YFSQYFNIVA LQLFYLSASI NPILYNLISK KYRAAFKLL LARKSRPRGF HRSRDTAGEV AGDTGGDTVG YTETSANVKT MG atggacctgc ccccgagct ctccttcggc ctcctatgtg cgcctttgc gctggcttc A cgcctcaacg tcttgccat cggagcgcg cgggcccacg cccgctccg tctacccct agctgggtct acgcccga cctgggctgc tccgacctgc tctgacagt cctctgccc ctgaaggcgg tggagcgct agctccggg gctggcctc tgcggcctc gctgtgcccc gtcttcggcg tggcccactt cttccacctc tatcgcgcg gggcttctt ggcgccccg agtgcaggcc gctacctggg agcagcttc ccttgggctt accaagcctt cggaggcgg tgctattcct ggggggtgtg cggggccatc tgggcccctg tctgtgtca cctgggtctg gtctttgggt tggaggctcc agaggctgg ctggaccaca gcaacacctc cctgggcatc aacacaccgg tcaacggctc tccggctgc ctggaggcct gggaccggc cctgcccggc cgggcccgtc tcagcctctc tctcctgctc tttttctgc ccttgccat cacagcctc tgctacgtgg gctgcctccg ggcactggc cgtccggcc cgcgcacag gcggaagctg cgggcccctt ggggtggcgg cggggccctc ctcagctgc tgcctgctg aggacctac aacgcctcca acgtggccag cttcctgtac cccaatctag gaggtcctg gcggaagctg gggctcatca cgggtgcctg gagtgtgtg cttaatccg tggtagccg ttacttggga agggtcctg gcctgaagac agtgtgtgc gcaagaacg aagggggcaa gtcccagaag taa	Homo sapiens
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338/448

Homo
sapiens

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477

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Homo
sapiens

LG6564

160202 Adrenomedull
in Receptor
(ADMR)

478

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ACCTATCATG AGACCTGCTG CTGTCTGACA CTGTATGGAA CCCACATCTG CCTACACTGC
CACTGGTAC CAACCTGCTCT ACTTCTTCTA TGATGTCTAG TGACTGTCTG TACATGCTAG
ACTGCGCTAT TCACCGGATC CTTGACAACT TTATCAGCCA GACTGCCGG GCGGCTCTCC
ATGCTGTGGT CCATTACTTG CTAAGGACCA GACCGCGGG GCACATGCGC CTCTCTCTCC
TTCTGTGACA CCCAGCGTTA CATAATCAT ACCACGGGTG ATAGCCAGAC TGCTGCGAGC
AACC CGCCAC CCGTGCAGCA AGCCTGAGCT TTCAGGCACA CCATTGCTC GCAAAGACTT
CGCCATGTG TCCCACTCAG TGCTCTACAC CCAGTGAGG T

Homo
sapiens

NM_007264

160202 Adrenomedull
in Receptor
(ADMR)

479

cagcctctc acagctcccc atagcctgga cctgcccggc ctccctccag gaccgagggg A
ctcccaagg aaactcaggc gtgtgctggt cccaatgtca gtgaaccca gctggggggc
tgccccctcg gaggggtca ccgcagtgcc taccagtgac ctggagaga tccacaactg
gaccgagctg cttgacctct tcaaccacac tttgtctgag tgccacgtgg agctcagcca
gagcaccagg cggtggtcc tctttgcct ctacctggc atgtttgtgg ttgggctggt
ggagaacctc ctggtgat at gcgtcaactg gcgaggctca ggcggggcag ggctgatgaa
cctctacatc ctcaacatgg ccacgcgga cctgggcatt gctctgtctc tgcccgtgtg
gatgctggag gtcacgctgg actacacctg gctctggggc agcttctct ggcgttccac
tactacttc tactttgtca acatgtatag cagcatcttc tctgtgtgt gctcagtggt
cgaccgctat gtcacctca ccagcctc cccctcctgg cagcgttacc agcaccaggt
gcggcgggcc atgtgtgag gcacttggt cctctcggcc atcatcccg tgccctgaggt
ggtccacatc cagctggtgg agggccctga gcccattgct ctcttcattg cacttttga
aacgtacagc acctggggcc tggcggtggc cctgtccacc accatcctgg gcttctgct
gcccttccct ctcatcacag tcttcaatgt gctgacagcc tgcgggctgc ggcagccagg
acaacccaag agcggcgcc actgcttct gctgtgcgc tactgtggcc tctttgtcat

480	160202 Adrenomedullin NP_009195.1 in Receptor (ADMR)	gtgctggctg ccctatcatg tgacctgctg gctgctcaca ctgcatggga cccacatctc cctccactgc cacctggctc acctgctcta ctcttctat gatgtcattg actgcttctc catgctgcac tgtgtcatca acccatcct ttaacaattt ctacagccac acttccgggg ccggctcctg aatgctgtag tccattacct tccaaaggac cagaccaagg cgggcacatg cgctcctct tctcctctgt ccaccagca tccatcatc atcaccaagg gtgatagcca gctgctgca gcagccccc accctgagcc aagcttgagc tttcaggcac accatttgc tccaaatact tccccatct cctccactca gctcttaca cccagctgag gta	Homo sapiens
		LAMFVGLVE NLLVICVNR GSGRAGLMNL YILNMAIDL GIVSLPVWM LEVLDYTWL WGSFSCRFTY YFYFVNMYS IFFLVCLSD RYVTLTSASP SWQRYQHRVR RAMCAGIWL SAIILPEV HQLVEGPEP MCLEMAPFET YSTWALAVALL STTILGFLP FPLITVFNVL TACRLRQPGQ PKRRRHCLLL CAYVAVFVMC WLPYHVTLILL LTLHGTHISL HCHLVHLLYF FYDVIDCFSM LHCVINPILY NFLSPHFRGR LLNAVVHYLP KDQTKAGTCA SSSSCSTQHS IIITKGDSP AAAAPHPEPS LSFQAHLLP NTSPISPTQP LTPS	
481	160204 G Protein-Coupled Receptor RTA	atgcgggttc tgcttccaaa gccatctctt ccagcaggag agggctctac tctgagctcc A tattttccaa gcttcgggc cgcgctcggc gctggcctgc tgcctcggcg ggtccgccc ccggaggcgg gagtcacagg aagagccctc cacaacaggga ggcctcggcg gatacggaca gctgcagggtg ggtgtgcaga ctggtgagct gcccagaggc gccagggcctg gagatggctg gaaactgctc ctgggaggcc catcccgga acaggaacag gatgtgccct ggcctgagcg agggcccgga actctacagc cggggcttcc tgaccatcga gcagatcgcg atgctgcgc ctcgggccgt catgaactac atcttctcct tctctgctt gctggtgctg gtgggcaacg ggtggtcct ctggtttttc ggcttctcca tcaagaggaa ccccttctcc atctacttcc tgcacctggc cagcgccgat gtgggctacc tcttcagcaa ggcggtgttc tccatcctga acacgggggg ctctcctggc acgtttgccc actacatccc cagcgtgtgc cgggtcctgg ggtcttgcct gtctcttacc ggcgtgagcc tctgcggcg cgtcagcgcc gagcgtcgc cctcgggtcat ctctcccgcc tggtaactgg cccggcgccc caagcgccctg tcggccgtgg tgtgcgccct gctgtgggtc ctgtccctcc tggtaacctg cctgcacac tacttctgcg tgttcttggg ccgcgggggc cccggcgcg cctgcaggca catggacatc ttcctgggca tctcctgtt cctgtcttgc tgcctgctca tgggtgctgc ctgcctggcc ctcactcctgc acgtggagtg ccgggcccga cggcgccagc gctctgcaa gctcaaccac gtcactcctgg ccatggtctc cgttctctg gtgtctcca tctacttag gatcgactgg tctctcttct ggttcttcca gatccgggc ccttccccc agtacgtcac tgacctgtgc atctgcatca acagcagcgc caagccatc gtctacttcc tggccgggag ggacaagtgc cagcggctgt gggagccgct cagggtggtc ttccagcgg cctgcggga cggcgtgag ctgggggagg ccgggggag cagcccaac acagtacca tggagatgca gtgtccccc gggaacgcct cctgagactc cagcgcctgg aggagcagg ggcaggaagc ggcctccaa accttctgccc ttgggacagg aatgggacac tgccttctgag tccatacagg agaagaaga tctgttttct ctcctcggc ctccttctcc ctgggctggg gactccagg gtggtggga gactgggag ccaccagcaa acagacctgt ggcctcctg cggctcccc accattctg ctccccctaga gaccttctgt acagaagtgt cccccagggt gtggggcccc tcttgccct aggctggttg gtaaaagaga ggaggtcaac accagccta gccacctctg cctcttggt	Homo sapiens

482	160204 G Protein-Coupled Receptor RTA	CAC39840.1	<p>cagccctcct tgactgtgtc ccagccagca ccagccagc agcctcatcc ctgccattca</p> <p>gggctgttcc agagattcga tcctcttaag gcattatcag tgagcaaatg tgaaggaaat</p> <p>ggtgtctgga agaaagtctt ggtcacatg ccttgtagct aagctttctt gcaacaacc</p> <p>tcccttcccc ccgtcagtc atttggtgac tttgggtggt ggattttctg ttatgtcaag</p> <p>gctctggaga caggaaggcc ctttgccgc ctggtggtgac tgacctgctt tttctgactc</p> <p>cgggacgagc cagtcctagg ctgcctccg gagcactga ggtatccgc aggccatgag</p> <p>gacccactgg gcagctctg gacagcctt tggctccag cccaccgga agtgggacac</p> <p>tggctccgcc ctggccacct ggggactggc actgtggtgc acagtggccc aatgtggcca</p> <p>acggaagttt tataaagac aaaaagtata tcaataaaca tttataact tgc</p> <p>MAGNCSWEAH PGNRNMCPG LSEAPELYSR GFLTIEQIAM LPPAVMNYI FLJLCLGLV P Homo sapiens</p> <p>GNGLVWFFG FSIKRNPFSI YFLHLASADV GYLFSKAVFS ILNTGGFLGT FADYIRSVCR</p> <p>VLGLCMFLTG VSLPVAESAE RCASVIFPAW YWRRPKRLS AVVCALLWVL SLLVTCLHNY</p> <p>FCVELGRGAP GAACRHMDIF LGILLFLCC PLMVLPCLAL ILHVECRARR RQSAKLNHV</p> <p>ILAMVSVFLV SSIYLGIDWF LFVWFQIPAP FPEYVTDLCI CINSSAKPIV YFLAGRDKSQ</p> <p>RLWEPLRVWF QRALRDGAEL GEAGGSTPNT VTMEMQCPPG NAS</p>	
483	160206 G Protein-Coupled Receptor GPR32	NM_001506	<p>atgaatgggg tctcggaggg gaccagaggc tgcagtgaca ggcaacctgg ggtcctgaca A</p> <p>cgtgatcgct cttgttcag gaagatgaac tcttcggat gcctgtctga ggaggtgggg</p> <p>tcctccgcc cactgactgt ggtatcctg tctgcgtcca ttgtcgtcgg agtgcgtggc</p> <p>aatgggctgg tgctgtgat gactgtctc cgtatggcac gcacggctc caccgtctgc</p> <p>ttctccacc tggcccttgc cgatttcagt ctctcactgt ctctgcccac tgccatgtac</p> <p>tatatgtct ccaggcagtg gctcctcga gactgggctt gcaaacctca catcacctt</p> <p>gtgttctca gctacttgc cagtaactgc ctcttctct tcatctctgt ggaccgttgc</p> <p>atctctgtcc tctaccctg ctgggccctg aaccaccgca ctgtgcagcg ggcgagctgg</p> <p>ctggcccttg ggtgtggt cctggccgc ccttctgtct ctgcgcacct gaaattcccg</p> <p>acaaccagaa aatgggaatgg ctgtacgcac tgcacttgg cgttcaactc tgacaatgag</p> <p>actgcccaga ttgggattga aggggtcgtg gagggacaca ttatagggac cattggccac</p> <p>ttctgtctgg gcttctctgg gcccttagca atcataggca cctgcgccc cctcatcccg</p> <p>gccaagctct tgcgggaggg ctgggtccat gccaaccgca ccaagaggct gctgctggtg</p> <p>ctggtgagcg ctttctttat cttctggtcc ccgttaacg tgggtgctgtt ggtccatctg</p> <p>tggcgacggg tgatgctcaa ggaatctac caccgccgga tgcgtctcat cctccaggct</p> <p>agctttgcct tgggctgtg caacagcagc ctaacccct tcctctacgt cttcgttggc</p> <p>agagatttcc aagaaaagt tttccagct tgcacttctg ccttggcag ggctgttggga</p> <p>gaggaggagt ttctgtcat ctgtccctg ggcacgccc cccgggaatg a</p> <p>MNGVSEGTG CSDRQPGVLT RDRCSRKN SSGCLSEEVG SLRPLTVVIL SASIIVGVLG P Homo sapiens</p> <p>NGLVLMWTF RMARTVSTVC FFHLALADEM LSLSLPIAMY YIVSRQWLLG EWACKLYITF</p> <p>VFLSYFASNC LLVFISVDRCL ISVLYPVWAL NHRIVQASW LAFGVWLLAA ALCSAHLKFR</p> <p>TTRXWNGCTH CYLAFNSDNE TAQIWIEGV EGHIGTIGH FLGLFLGPLA IIGTCAHLIR</p> <p>AKLLREGWVH ANRPKRLLV LVSAFFIWS PFNVVLLVHL WRRVMLKEIY HPRMLLILQA</p> <p>SFALGCVNSS LNPFLYFVFG RDFQEKFFQS LTSALARAFG EEEFLSSCPR GNAPRE</p>	
484	160206 G Protein-Coupled Receptor GPR32	NP_001497.1	<p>gagctccctc agggctggaa tctgtgtct cctctgtgcc cagagcccca cgatgtcggc</p>	
485	160210 G Protein-Coupled	NM_004778	<p>gagctccctc agggctggaa tctgtgtct cctctgtgcc cagagcccca cgatgtcggc</p>	

Receptor
GPR4
(CRTH2)

caacgccaca ctgaagccac tctgccccat cctggagagag atgagccgtc tceagagcca
cagcaaacac agcatccgct acatcgacca cgcggccgtg ctgctgcacg ggtggccctc
gctgctgggc ctggtggaga atggagtcac cctcttcgtg gtggctgccc gcctggccca
gaccgtggtc accacctggg tctgcaacct ggcgctgtcc gacctgttgg cctctgcttc
cctgcccctc ttcacctact tcttgccggt ggccactcgt tgggagctgg gcaaacctt
ctgcaaaactg cactcctcca tcttctttct caacatgttc gccagcggct tctgctcag
cgccatcagc ctggaccgct gcctgcagggt ggtgcggccg gtgtgggccc agaaccaccg
caccgtggcc cggcgccaca aagtctgcct ggtgctttgg gcactagcgg tgcataaac
ggtgccctat ttcgtgttcc gggacacctat ctgcggctg gacggcgcca tcatgtgcta
ctacaatgtg ctgctcctga acccggggcc tgaccggcat gccacgtgca actcggccca
ggcgccctg gccgtcagca agttcctgct ggcttctctg gtgccgtgg cgatcatcgc
ctcgagccac cgggccgtga gcctgcgggt gcagcacccg gccgcggcc gcccaggccc
cttcgtgccc ctggtggcag cgtcgtggc cgccttcgct ctctgctgg ggcctacca
cgtgttcagc ctgctggagg cgcggggcga cgcataaccg ggtcgcggc cgtcgtgtg
gcggggctg cctctcgtca ccagcctggc cttcttcaac agcgtggcca acccggtgct
ctacgtgctc acctgcccc acatgctgct caagctgccc gctcgtgct gcacggtgct
ggagagcgtg ctggtggagc acagcgagct ggtggggcgg ggaagcagcc gcgcggccc
cacctcctcc accgcccgt cggcctcccc tttagctctc tgcagccgc cggaggaaac
gcggggcccc gcgcgtctcc tggctggct cctgggcagc tgcgcagcgt cccgcagac
gggccccctg aaccggggc tgagcagcac ctcgagttag aaccggccc acgtagggg
gcactcacac gcgaaagtat caccagggtg ccgcggttca attcgatc cggactcctg
ccgcagtgat caaagtccga gggcggggac ccaggcacct gcattttaaa gcgccccggg
agactctgaa tctttttcag aaacagtga taaagcagc gcttctcaaa ccttgatgtg
cctgtgaatc acctagggtt cttgttaagt gcagtctgat ccaggaggcc gggggccggg
actgagagtc tgcacttaac aagctcccc gcgcgagaagc cagtgcggca ggttcacagg
cgaggccctg agtaaacaca agtgaaactc gtaatagact tcccactcta gggcagtgga
gtcggaaagg cacacggggt gcgtctcccc ggagttcagt ttaccagat gatgggggag
gggggaaagg gttttatgt aaacctcca tgtatttttg gagaagagag aggaaaagtt
tgagaagcac tgttccagc tgcctcttc atttagccaa tgccttactgc gctagacgct
tcatccca atcttaagg gcagcttcta tttagccagtc ttacagctg agcacattct
ggctcaggga ggttaagtga ctgcccagt tttagggcta acgaccacag ggtctgcact
ctaaccctag gcatcacatg ctcaatgact cctggtgtag cgaggacatt ctctgacct
ctcgagggac ttaagatgct acctgtgac ccagcactgc ccaaagtct tccaaggcag
aagcagcagg ggtggcgtg gtcaagcact cgggaaacct ggggctaact aaatccaatg
ggggaaatga ctaaaagtct tgggtcgta gaagtgaat gggcacagca actctaagac
tacagcacac gtcatttctt agctaagcgg accagcctcc ctgtcgccct ggtgttctgt
gggatccctc tgggcactgg taatcccaag atctgtgtag cccgcctcc aggccacatg
gggctgggca gctaccattt ccttttgcg gatgggagg gtaacttga cctctgacct
atcacttcca ctgcacccc tctcattcct ccactggcc tggacttgg gtcagagact
gctgtgtttg agctctgcag ccagggacc gaaaagtgg tgcataatgaa ttttgcttgg
tggatgaaat gtcagtggaa gaagcagatg agaaactctt gagatcttgg tctgtgttt

486	160210 G Protein- Coupled Receptor GPR44 (CRTH2)	NP_004769.1	<p> tttctgccac caaaggccag ggtcactgaa ggccctggccc acagcaggtg ctgagcaaaag ggaacagtga ggtgcccagc tagctgcaga gccaccctgt gttgacacct cgccccctgct cccctcccatc cctcccccct ttactcatag cacttcccc attggacacg tgggtgcattt tgcctgtttta ttatgttttc tctccatcag aatgaaagct cctcgagggc agggactttg gctctattgtc tgtattttgcc ggtgcctagg attgtgcctg tatgcaacag gcactcaata aatatatttg ctgtagactg 9 </p>	Homo sapiens
			<p> MSANATLKPL CPILQMSRL QSHSNTSIRY IDHAAVLLHG LASLLGLVEN GVILFVVGCR P MRQTVVTTWV LHLALDLLA SASLPFFTYF LAVGHSWELG TTFCCKLHSSI FFLNMFASGF LLSAISLDRCLQVVRPWAQ NHRTVAAAHK VCLVLWALAV LNTVPYFVFR DTISRLDGR MCYYNVLLN PGPRDATCN SRQAALAVSK FLAFLVPLA IIASSHAAVS LRLQHRGRRR PGRFVRLVAA VVAAFALCWG PYHVFSLEA RAHANPGLRP LVWRGLPFVT SLAFNSVAN PVLYVLTCPD MLRLRRSLR TVLESVLVDD SELGGAGSSR RRRSTSARS ASPLALCSRP EEPGRPARLL GWLLGSCAAS PQTGPLNRAL SSTSS </p>	
487	160212 G Protein- Coupled Receptor GPR52	NM_005684	<p> atgaatgaat ccaggtggac tgaatggagg atcctgaaca tgagcagtggt cattgtgaat A gcgtccgagc gtcactcctg cccacttgga ttgggccact acagtgtggt ggatgtctgc atcttcgaga cagtgttat tgtgtgtctg acatttctga ttattgtcgg gaactaaca gtatatcttg cctttcattg tgcctcactg ttacatcatt atactaccag ctatttcatt cagacgatgg catatgctga tcttttcgtt ggagttagct gcttggttcc tactctgtca ctctccact actccacagg tgcctacagg tctataactt gccgggtttt tggatataatc atctcagttc taaaaagtgt ttctatggca tgccttctt gccatcagtg ggtatcgttat ctgtcaataa ccaagcctct tctctacaat caactgggtca cccctgtcgg cttagagaatt tgcattattt tgatctggat ctactcctgc ctaatttctt tgccttccct ttttggtcgg gggaacacctg gttaccatgg tgacattttt gaatgggtgt ccacgtcttg gctcaccagt gcctatttta ctggctttat tgtttgctta ctttatgctc ctgtgcctt tgttgcctgc ttacactact tccacatttt caaaatttgc cgtcagcaca ccaagagat aatgaccga agagcccgat tccctagtc tgcagtagat tcttccagag agactggaca cagccctgac cgtcgtacg ccattgtttt gtttaggata accagtgtat tttatatgct tgggtcccc tatataattt actttcttct agaaagctcc cgggtcttgg acaatccaac tctgtccttc ttaacaaact ggcttcagat aagtaaatag ttttgtaact gtgtaataa cagcctctcc aacggcgttt tccggctagg cctccgaaga ctgtttgaga caatgtgcac atcctgtatg tgtgtgaagg atcaggaagc acaagaacc aaacctagga aacgggctaa ttcttgctcc attga </p>	Homo sapiens
488	160212 G Protein- Coupled Receptor GPR52	NP_005675.1	<p> ILNMSSGIWN ASERHSCPLG FGHYSWVDVC IFETVVIVLL TFLIIAGNLT P VIFAFHCAPL LHYYTTSYFI QTMAYADLFV GVSLVPTLS LLHYSTGVHE SLTCRVFGYI ISVLKSVSMA CLACISVDRY LAITKPLSYN QLVTPCLRRI CIILWIYSC LIFLPSFFGW GKPGYHGDIF EWCATSWLTS AYFTGFIVCL LYAPAAFVVC FTYFHFKIC RQHTKEINDR RARFPSHEVD SSRETHSPD RRYAMVLFRI TSVFIMLWLP YIIYFLESS RVLNPTLSE LTTWLAVSNS FCNCVIYSL NGVFRGLRR LFETMCTSCM CVKQDEAQP KPRKRANSCS I </p>	Homo sapiens
489	160217 G Protein- Coupled	NM_005683	<p> atgagtcagc aaaacaccag tggggactgc ctggtttgacg gtgtcaacga gctgatgaaa A accctacagt ttgcagtcca catccccacc ttgctcctgg gctgtcctct caacctgctg </p>	Homo sapiens

Receptor
GPR55

Homo
sapiens

490 160217 G Protein-Coupled Receptor GPR55 NP_005674.1

gcatccatg gcttcagcac cttccttaag aacaggtagc ccgattatgc tgcacactcc
atctacatga tcaacctggc agtctttgac ctgctgtggt tgctctccct ccatccaag
atggtcctgt ccagggtaca gtcccccttc ccgtccctgt gcacctggt ggagtgcctt
tactctgtca gcatgtacgg aagcgtcttc accatctgct tcatcagcat ggaccgggtc
ttggccatcc gttaccgcct actggtgagc cactccggtc cccagggaag atctttggga
tctgcatgca caatctgggt cctggtgtgg accggaagca tccctatcta cagtttccat
gggaaagtgg aaaaatacat gtgcttccac aacatgtctg atgataacctg gagcgccaaag
gtcttcttcc cgctggaggt gtttggtcttc ctcttccca tgggcatcat gggcttctgc
tgctccagga gcatccacat cctgctgggc cgccagagcc acaccagga ctgggtgcag
cagaaagcct gcatctacag catcgagcc agcctgggtg tattcgtggt ctcttcttc
ccagtcacc ttgggttctt cctgcagttc ctggtgagaa acagctttat cgtagagtgc
agagccaagc agagcatcag cttcttcttg caattgtcca tgtgttctc caatgtcaac
tgctgcctgg atgttttctg ctactacttt gtcatcaaaag aattccgcat gaacatcagg
gcccaccggc cttccagggt ccagctggtc ctgcaggaca ccagatctc ccggggctaa
MSQONTSGDC LFDGVNELMK TLQFAVHIPT FVLGLLNL AIHGFSTFLK NRWPDYAATS P
IYMINLAVFD LLLVLSLPFK MVLSQVQSPF PSLCTIVECL YFVSMYGSVF TICFISMDRE
LAIRYPLLVS HSGPPGRSLG SACTIWVLWV TGSIPYSFH GKVEKYMCFH NMSDDTWSAK
VFFPLEVFGF LLPMGIMGFC CSRSIHILG RRDTQDWVQ QKACIYSIAA SLAVFVVSFL
PVHLGFFLQF LVNRSFIVEC RAKQSISFFL QLSMCFSNVN CCLDVFCYYF VIKFRMNIR
AHRPSRVQLV LQDTTISRG

Homo
sapiens

491 160219 G Protein-Coupled Receptor GPR35 NM_005301

atgaatggca cctacaacac ctgtggtctc agcactctca cctggccccc agcatcaag A
ctgggcttct acgctactt gggcgtcctg ctggtgctag gcctgctgct caacagcctg
gcgctctggg tgttctgctg ccgcatgcag cagtggacgg agaccgcgcat ctacatgacc
aacctggcgg tggccgacct ctgctgctg tgcaacttgc cctctgctg gcaactccctg
cgagacacct cagacacgcc gctgtgccag ctctccacgg gcatctacct gaccaacagg
tacatgagca tcagcctggt caggccatc cccgtggacc gctatgtggc cgtgcggcac
ccgctgcgtg cccgcgggt cgggtccccc aggcaggctg cggcgtgtg cgcggtcttc
tgggtgctgg tcatcgctc cctggtggct cgctggctcc tgggattca ggaggcggc
ttctgcttca ggagcaccg gcacaatttc aactccatgc ggttccgct gctgggattc
tacctgcccc tggcgtggt ggtcttctg tccctgaagg tggtagctgc cctggccccag
aggccaccca ccgacgtggg gcaggcagag gccacccgca agcctgccc catggtctgg
gccaacctcc tgggttctg ggtctgctc ctgccccctg acgtgggct gacagtgcgc
ctcgagtggt gctggaacgc ctgtgcccct ctggagacga tccgtcgcg cctgtacata
accagcaagc tctcagatgc caactgctgc ctggacgcca tctgctacta ctacatggcc
aaggagtcc aggagcgctc tgcactggcc tgggtcccc gtgctaaggc ccacaaaagc
caggactctc tggcgtgac cctcgccctaa

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492 160219 G Protein-Coupled Receptor GPR35 NP_005292.1

NGTYNTCS SLDLWPPAIK LGFYAYLGVL LVGLLLNSL ALWVFCRMQ QWTETRIYMT P
NLAVADLCLL CTLPLVLHSL RDTSDTFLCQ LSQGIYLTNR YMSISLVTAI AVDRYVAVRH
PLRARGLRSP ROAAVCAVL WVLVIGSLVA RWLLGQEGG FCFRSTRHNF NSMRFPLLGF
YLPLAVVVEC SLKVVTALAQ RPPTDVQAE ATRKAARMVW ANLLVFVCF LPLHVGLTJR
LAVGWNACAL LETIRRALYI TSKLSDANCC LDAICYMYMA KEFQEAASALA VAPRAKAHKS

493	160221	G Protein-Coupled Receptor GPR27	NM_018971	QDSLCVTLA	atggcgaaacg cgagcgagcc gggtggcagc ggcgggcgcg aggcggcgcc cctggggcctc A aagctggcca cgctcagcct gctgctgtgc gtgagcctag cgggcaacgt gctgttcgcg ctgctgatcg tgcgggagcg cagcctgcac cgcgccccgt actacctgct gctcgacctg tgcttgccg acgggctgcg cgcgctcgcc tgcctccccg ccgtcatgct ggcggcgcg cgtgcggcgg ccgcggcggg ggccgcgcgg ggcgcgctgg gctgcaagct gctgccttc ctggccgcgc tcttctgctt ccacgcgcgc ttcctgctgc tggcgctggg cgtcacccgc tacctggcca tcgcgcacca ccgcttctat gcagagcgcc tggcgcgctg gccgtgcgcc gccatgctgg tgtgcgcgc ctgggcgcg cgcctggccg cggccttccc gccagtgcg gacggcggtg gcgacgacga ggacgcgcg tgcgccccg agcagcgcc cgacggcgcc ccggcgcgcc tgggttctct gctgctgtg gccgtgggtg tggcgcccc gcacctcgtc tacctccgcc tgccttctt catccacgac cgcgcgaaga tgcggcccc gcgctgggtg ccgcgcgtca gccacgactg gaccttcac ggccggggcg ccacggcca ggcggcgcc aactggacgg cgggcttcgg ccgcgggcc acgcggccc cgttgtggg catccggccc gcagggccgg gccggcgcc gcgcgcctc ctgctgctgg aagaattcaa gacggagaag aggctgtgca agatgttcta cgcgtcacg ctgctcttcc tgcctctctg gggccctac gtcgtggcca gctacctgcg ggtcctggtg cggcccgcg ccgtccccc ggctacctg acggcctccg tgtgctgac ctgcgcgag cgcggcatca acccgtcgt gtgcttctc ttcaacaggg agctgaggga ctgcttcagg gccagttcc cctgctgcca gagcccccg accaccagg cgaccatcc ctgcgacctg aaaggcattg gtttatga CLADGLRALA CLPAVMLAAR RAAAAAGAPP GALGCKLLAF LAALFCFHAA FLLLVGVT YLAIAHRRFY AERLAGWPCA AMLVCAAWAL ALAAAFPPVL DGGGDEDEDAP CALEQRPDGA PGALGFLLL AVVVGATHLV YLRLLFFIHD RRMKRPARLV PAVSHDWTFF GPGATGQAAA NWTAGFGRGP TPPALVGIRP AGPGRGARLL LVLEEFKTEK RLCKMFYAVT LFLLLMGPY VVASYLRVLV RPGAVPQAYL TASWLTFAQ AGINPVVCFE FNRELDCFR AQFPCCQSPR TTQATHPCDL KGIGL	Homo sapiens
494	160221	G Protein-Coupled Receptor GPR27	NP_061844.1		atggtcctc acctcttgc tctgtctc ctcccttgg tgcgagccac cgagccccac A gagggccggg ccgacgagca gagcgcgag cgcgccccg ccgtgcccc tgcctcgac ttcttctctt ggaacaacta cacttctcc gactggcaga acttggggg caggaggcgc tacggcgctg agtcccagaa cccacgggtg aaagccctgc tcattgtggc ttactcctc atcattgtct tctcactctt tggcaacgtc ctggtctgtc atgtcatctt caagaaccag cgaatgcaact cggccaccag cctcttctc gtcaacctgg cagttggcca cataatgatc acgtgctca caccacctt cactttggtt cgttttgtga acagacatg gataattggg aagggcattg gccatgtcag ccgctttgcc cagtactgct cactgcactg ctacgacatg acactgacag ccattgcgtt ggatcgccac caggtcatca tgcacccctt gaaacccccg atctcaatca caaagggtgt catctacatc gctgtcatct ggaccatggc tacgttctt tcaactccac atgctatctg ccagaaatta ttacacctca aatacagtga ggacattgtg cgctccctct gcctgcccga cttccctgag ccagctgacc tcttctggaa gtacctggac ttggccacct tcactctgct ctacatcctg cccctcctca tcactctgtt ggcctacgt	Homo sapiens
495	160222	G Protein-Coupled Receptor GPR72	NM_016540			Homo sapiens

496 160222 G Protein-
Coupled
Receptor
GPR72

NP_057624.1
MVPHLLLLCL LPLVRATEPH EGRADEQSAE AALAVPNASH FFSWNNYTF S DWQNFVGRRR P
YGAESQNPV KALLIVAYSF IIVFSLEGNV LVCHVIFKNQ RMHSATSLFI VNLAVADIMI
TLNLTPTLV RFVNSTWIFG KGMCHVSREFA QYCSLHSDIV RSLCLPDFPE PADLFWKYLD
ISITKGVII AVIWTMATEFF SLPHALCQKL FTFKYSDEIV FALRRKKKT IKMLMLVVVL
LATFILLIYL PLLIISVAYA RVAKKLWLCN MIGDVTTEQY NFPIYCWLINE NFRIELKALL
FALCWFP LNC YVLLLSKVI RTNNALYFAF HWFAMSTCY NPFIYCWLINE NFRIELKALL
SMCQRPKPQ EDGQSPVPS FRVAWTEKND GQRAPLANNL LPTSQIQSGK TDLSSVEPIV
TMS

Homo
sapiens

497 160223 G Protein-
Coupled
Receptor G2A

NM_013345
ggaggggggtg cgaggctagc cagcaggcg gggccctggg tcattttaaa ctctcagagt A
gaacgtcttg ataggaccga caagacgcat gacatgtact tagatagctt atcttagagc
cacactgaga ttggaacccg caaaatatgc caggagagaa ggtgagcaag ggacacgaca
ctcaccggga taaacccaac aagcgagcg aggcgtgtgg gaaacggan cctgcacac
cgccggggga agtggggcn ccgccaccac cgtggaagaa cagcgcgan gacccccacg
agatgagacg gaactgcccgt gagatccagc aatnccnact gtgggtctga cccaggatan
cggaagcag ggacgtgaac agccctctc atgtcttga caccgtcatt ctccagcagct
cagctaaagg acagaggcag ccgagcgtct gtcagcagag tcgtggctga gcagaacacg
ccacacgcca cagccacac gccacacgtg caggattgct caagatggaa gggcacagtg
gaatatatat atatatatat atttttggcg agaccctgga ggacacactg aatacaatgg
aataccatcc cgcctttgaa aggaaggaa atcctggcac acgctgcaac aggaggagc
ttgaggacac tgtgtgagt ggagcacgtg agacacgaa ggacacacgc tgaagacacg
cagagatgcc caccacgtg ggaggtgac aggggagccc agcgacaga gacaaagtgg
aatggaggcc tgggggctgg gagcaaatgc ggagcgagtg ctctctgggg cagagtctcc
gtttgggaaag atgagaaggt tctgcccagc gatgctggcg atggttgagc aagaatgtga
atgtgccccaa tgctactgaa aaacggttac aatggaaacg ccacccagc gaccaccact
gccccgtggg cctccctggg cctctccgc aagacctgca acaacgtgc ctctgaagag

Homo
sapiens

498	160223	G Protein- Coupled Receptor G2A	NP_037477.1	MCPMLLKNGY NGNATPVTTT APWASLGLSA KTCNNVSFEE SRIVLVVVYS AVCTLGVPAN P CLTAWLALLQ VLOGNVLAIVY LLCLALCELL YTGTLPLWVI YIRNQHRWTL GLLACKVTAY IFFCNIIYVSI LFLLCISCDR FVAVVYALES RRRRRRTAI LISACIFILV GIVHYPVFQT EDKETCFDML QMDSRIAGYY YARFTVGFAI PLSIIAFTNH RIFRSIKQSM GLSAAQKAKV KHSIAIVAVI FLVCFAPYHL VLLVKAAAFS YRGRDRNAMC GLEERLYTAS VFVLCSTVN GVADPIIYVL ATDHSRQEVLS RIHKGWKEWS MKTDVTRLTH SRDTEELQSP VALADHYTFS RPVHPGSPC PAKRLIEESC	Homo sapiens
499	160224	Endothelin Type B Receptor- Like Protein 2 (ETBR-LP- 2)	NM_004767	cggtgactg ggtgtacagc ggggtgtgca cggtgggggt gctgtgctgct ggcggccaac tgctgactg cgtggctggc gctgtgcag gtactgcagg gcaactgtgt ggcgtctac ctgctctgc tggcactctg cgagtgtgtg tacacaggca cgctgccact ctgggtcact tatatccgca accagcaccg ctggacccta ggcctgtgtg cctgcaagggt gaccgctac atcttctct gcaacatcta cgtcagcatc ctcttctgt gctgcatctc ctgacaccg ttcgtggccg tgggtacgc gctggagagt cggggccgcc gccgccggag gaccgccatc ctcatctccg cctgcatctt catctcgtc ggatecgtt actaccgggt gtccagacg gaagacaagg agacctgctt tgacatgctg agatggaca gcaggattgc cgggtactac tacgccagg taccggttg ctttgccatc ctctctcca tcatgcctt caccaccac cggattttca ggagcatcaa gcagagcatg ggcttaagcg ctgcccagaa ggccaagggtg aagcactcg ccactgcggt ggtgtcatc ttctagtct gcttgcgcc gtaccacctg gttctctcg tcaagccgc tgccttttc tactacagag gagacaggaa cgccatgtgc ggcttgagg aaaggctgta cacagcctct gtggtgttc tgtcctgtc caggtgaac ggcgtggctg acccattat ctacgtgtg gccacggacc attcccgcca agaagtgtcc agaatccata aggggtggaa agagtgtcc atgaagacag agtcaccag gtcacccac agcagggaca ccgaggagct gcagtcgcc gtggccctg cagaccacta cactctctc aggccctgc accaccagg gtcaccatgc cctgcaaaga ggcgtattga ggagtcctgc tgagccact gtgtggcagg gggatggcag gttgggggtc ctggggccag caatgtgggt cctgtgact gagccacca gccacagtgc ccatgtccc tctggaagac aaactaccaa ttctcgttc ctgaagccac tccctcgtg accactggcc ccangcttcc ccacatggaa ggtggtgca tgcgaagggt aagagcgaca cctcaggct tccgggagcc canagagcat gtggcangca gtggggcctc ttcacatca nctgcctg ctggctccct tggctgtggg cangtacacc cctgtggca gaagtacctg gtgctgccc tgttcgcac agtggcgatg actttattt cggagcattt ctgcaagcgt tgcctggatg cgtggtgtga ttgtggccc tctgggtcc tgcctcaaaa tgtcagttag caccatgctg gaagtcacca tcatgtggc agcggccagg aaggcatagg gcancctacc acctccaang gggcangcgc cctcatctg ggttgggt	Homo sapiens

500	160224	Endothelin Type B Receptor- Like Protein 2 (ETBR-LP- 2)	NP_004758.1	<p> accgagagct cctacagtgcc ctatgccatc atgctttctgg cgctggtggt gtttgcggtg ggcatgtgg gcaacctgtc ggtcatgtgc atcgtgtggc acagctacta cctgaagagc gcctggaact ccatacttgc cagcctggcc ctctgggatt ttctggtcct ctttttctgc ctccctattg tcatactcaa cgagatcacc aagcagaggg tactgggtga cgtttcttgt cgtgccgtgc ccttcattga ggtctctct ctgggagtc cgaatttcag cctctgtgcc ctgggcatg accgcttcca cgtggccacc agcacctgc ccaagggtgag gcccatcgag cgggtgccaat ccatactggc caagtgggt gtcactgtgg tgggctccat gacgtggct gtgctgagc tctgtgtg gcagctggca caggagcctg cccccaccat gggcacctg gactcatgca tcataaacc ctacagccagc ctgcccagat cctgtattc actggtgatg acctaccaga agcccgcat gtggtgttac ttgggtgtct acttctgct gccatctc ttacagtgca cctgccagct ggtgacatgg cgggtgcgag gccctccagg gaggaagtca gagtgcagg ccagcaagca ctagcagtg gtgagccagc tcaacagcac cgtggtgggc ctgaccgtgg tctagcctt ctgacccctc ccagagaacg tctgcaacat cgtggtggcc tacctctcca ccgagctgac ccgccagacc ctggacctcc tgggctccat caaccagttc tccacctct tcaagggtgc catacccca gtgctgtccc ttgcatctg caggccgtg gcccaggcct tctggactg ctgctgtgc tgcgtgtg aggagtgcgg cgggcttcg gaggcctctg ctgccaatgg gtggacaac agctcaaga ccgaggtgtc ctctccatc tacttccaca agcccaggga gtacacccca cctctgccc tgggcacacc ttgctgaggc cccagtaggg gtggggaggg agggagagg cggcaccccc gccgtgtct gctgtcttt ccccataggt cttgctttgt tgcctgtctt gctgtctagg gatgacttg gttcctcttg tcaagggttg ggaatccg </p>	Homo sapiens
501	160225	Sphingolipid Receptor Edg6	NM_003775	<p> gagtcagccc ccgggggagg ccatgaacgc caggggacc ccggtggccc ccgagtctg A ccaacagctg gcggccggcg ggcacagccg gctcattgt ctgcactaca accactcggg ccggtggcc ggccgcgggg ggccggagga tggcgccctg gggccctgc ggggctgtc ggtggccgc agctgcctg tgggtctgga gaacttgct gtgctggcg ccataccag ccacatgcgg tcgcagcgt ggtctacta ttgcctggg aacatcacg tgagtgcct gctcacgggc gcggcctacc tggccaacgt gctgctgct ggggccgca ccttcgctt ggcccccgc cagtgttcc tacgggaggg cctgctctt accgccctg ccgccctac cttcagcctg ctcttactg caggggagcg ctttgcacc atggtgcgg cgggtggcga gaggggggc accaagacca gccgcgtcta cggcttcat ggcctctgct ggtgctggc cgcgctgctg gggatgctg ctttgcctg ctggaactgc ctgtgcgct ttgaccgctg ctccagcctt ctgcccctt actccaagc ctacatctc ttctgcctg tgatcttcg </p>	Homo sapiens

502	160225	Sphingolipid NP_003766.1	Receptor Edg6	<p> cggcgctcctg gccaccatca tgggcctcta tggggccatc ttccgcctgg tgcaggccag cgggcagaag gcccacgcc cagcgccccg ccgcaaggcc cgcgcctgc tgaagacggt gctgatgac ctgctggcct tectgtgtg ctggggccca ctctcgggc tgcgtctggc cgacgtcttt ggtcccaacc tctgggcccc gaggtacctg cggggcatgg actggatcct ggccctggcc gtcctcaact cggcggtcaa ccccatcatc tactccttcc gcagcaggga ggtgtgcaga gccgtgctca gcttctctg ctgcgggtgt ctcgggctgg gcatgcgagg gcccggggac tgcctggccc gggccgtcga ggctcactcc ggagcttcca ccaccgacag ctctctgagg ccaagggaca gctttcgcg ctcgccctcg ctacgctttc ggatgcggga gcccctgtcc agcatctcca gcgtgcggag catctgaagt tgcagtcttg cgtgtggatg gtgcagccac cgggtgcgtg ccaggcaggc cctcctgggg tacaggaagc tgtgtgcacg cagcctcgcc tgtatgggga gcagggaacg ggacaggccc ccatgggtctt cccggtggcc tctcggggct tctgacgcca aatgggcttc ccatgggtcac cctgacaag gaggtaacca ccccacctcc ccgtaggagc agagagcacc ctggtgtggg ggcgagtgggt tccccacaac cccgttctg tgtgattctg gggaagtccc ggcctctctc tgggcctcag tagggctccc aggctgcaag ggtggactg tgggatgcat gccctggcaa catgaagt cgatcatggt aaaaa </p>	Homo sapiens
503	160228	T-Cell Death-Associated Gene 8 (GPR65)		<p> atgaacagca catgtattga agaacagcat gacctggatc actatttgtt tccatttgtt tacctcttg tgattatagt cagcattcca gccaatattg gatctctgtg tgtgtctttc ctgcaaccca agaaggaaaag tgaactagga atttacctct tcagtttgtc actatcagat ttactctatg cattaactct cctttatgg attgattata ctggaataa agacaactgg actttctctc ctgccttgtg caaaggaggt gctttctca tgtacatgaa gttttacagc agcacagcat tctcacctg catggccgtt gatcgggtatt tggctgttgt ctaccctttg aagtttttt tctaaaggac aagaagaatt gcactcatgg tccgctgtgc catctggata ttggaaacca tctcaatgc tgtcatgttg tgggaagatg aaacagttgt tgaatatggc gatgccgaaa agtctaattt tactttatgc tatgacaaat accctttaga gaaatggcaa atcaacctca actgtgtcag gacgtgtaca ggctatgcaa taccttttgt caccatcctg atctgtaacc ggaagtcta ccaagctgtg cggcacata aagccacgga aaacaaggaa aagaagagaa tcatataaact acttgtcagc atcacagtta ctttgtctt atgctttact ccctttcatg tgatgttgtt gattcgtctg attttagagc atgctgtgaa cttcgaagac cacagcaatt ctgggaagcg aacttacaca atgtatagaa tcacgggttg attaacaagt ttaaattgtg ttgtgtatcc aattctgtac tgttttgtta ccgaacacagg aagatatgat atgtggaata tatataaatt ctgcactggg aggtgtaata catcaaaaag acaagaaaaa cgcatacttt ctgtgtctac aaagataact atggaattag aggtccttga gtag </p>	Homo sapiens

Accession	Gene	Protein	Species	Sequence
506	160300 Encephalopsin		Homo sapiens	<p>160300 Encephalopsin NP_055137.1</p> <p>MYSGNRSGGH GYWDGGGAAG AEGPAPAGTIL SPAPLFSPGT YERLALLLGS IGLLGVGNL P</p> <p>LVLVLYYKFQ RLRTPTHLLL VNISLSDLIV SLFGVTFTFV SCLRNGWVWD TVGCVWDGFS</p> <p>GSILFGIVSIA TLTVLAYERY IRVVARHVIN FSWAWRAITY IWLYSLAWAG APLLGNWRYI</p> <p>LDVHGLGCTV DWKSKDANDS SFVLFLFLGC LVVPLGVIAH CYGHILYSIR MLRCVEDLQT</p> <p>IQVIKILKYE KKLAKMCFLM IFTFLVCWMP YIVICFLVNV GHGHLVPTPTI SIVSYLFAKS</p> <p>NTVYNPVIYV FMIRKFRSL LQLLCLRLR CQRPADLPA AGSEMQRPI VMSQKDGRDP</p> <p>KKKVTFNSSS IIFITSDS LSVDDSDKTI GVQSLMLIQV RPL</p>
507	160312 Sphingolipid Receptor Edg5		Homo sapiens	<p>160312 Sphingolipid Receptor Edg5 NM_004230</p> <p>atgggcagct tgtactcgga gtacctgaac cccaacaagg tccaggaaca ctataattat A</p> <p>accaaggaga cgttggaac gcaggagacg acctcccgcc aggtggcctc ggccttcac</p> <p>gtcatcctct gttgcgccat tgtggtgga aaccttctgg tgcctattgc ggtggcccg</p> <p>aacagcaagt tccactcggc aatgtacctg ttctgggca acctggccgc ctccgatcta</p> <p>ttggcaggcg tggccttcgt agccaatacc ttgctctctg gctctgtcac gctgaggctg</p> <p>acgcctgtgc agtggtttgc ccgggagggc tctgcctcca tcaagctctc ggcctctgc</p> <p>ttcagcctcc tggccatgc cattgagcgc cactgtggca ttgccaaggt caagctgtat</p> <p>ggcagcgaca agagctggcg catgcttctg ctcatcgagg cctctgggt catctcgtg</p> <p>gtcctcggtg gcctgcccat ccttggtcgg aactgcctgg gccactcga ggcctgctcc</p> <p>actgtcctgc ctctctacgc caagcattat gtgctgtgcg tggtagacat ctctccatc</p> <p>atcctgttgg ccactgtggc cctgtacgtg cgtactact gctggtccg ctcaagccac</p> <p>gctgacatgg ccgcccgcga gacgtagcc ctgctcaaga cggtcacat cgtgctaggc</p> <p>gtctttatcg tctgtggtg cccgccttc agcatcctcc ttctgacta tgcctgtccc</p> <p>gtccactcct gcccgatcct ctacaaagcc cactactttt tgcgcgtctc caccctgaat</p> <p>tcctgtctca acccgtcat ctacacgtgg cgcagccggg acctgcggcg ggaggtgctt</p> <p>cggcgcgtgc agtgcctggc gccgggggtg ggggtgcaag gacggaggcg ggtcgggacc</p> <p>cggggccacc acctcgtgcc actcgcgagc tccagctccc tggagagggg catgcacatg</p> <p>cccaagtcac ccacgttctt ggagggcaac acggtggtct ga</p>
508	160312 Sphingolipid Receptor Edg5		Homo sapiens	<p>160312 Sphingolipid Receptor Edg5 NP_004221.1</p> <p>MGSLYSEYLN PNKQEHVNY TKETLETQET TSRQVSAFI VILCCAIVE NLLVLIAR P</p> <p>NSKFHSAMYL FLGNLAASDL LAGVAFVANT LLSCGVTLR TPVQWFAREG SASITLSASV</p> <p>FSLLAIAIER HVAIKVKLY GSKSCRMLL LIGASWLISL TVGGLPILGW NCLGHLEACS</p> <p>TVLPLYAKHY VLCVWTFISI ILLAIVALLY RIYCVVRSSH ADMAAPQTLA LLKTVTIVLG</p> <p>VFIVCWLPAP SILLDDYACP VHSCPILYKA HYFAVSTLN SLLNPVIYTW RSRDLRREV L</p> <p>RPLQCWRPGV GVQRRRRVGT PGHLLPLRS SSSLERGMHM PTSPTFLEGN TW</p>
509	160314 G Protein-Coupled Receptor GPR103		Homo sapiens	<p>160314 G Protein-Coupled Receptor GPR103 AF411117</p> <p>atgatactgt gcagtgctct gagccctagg attcatcttt cttttcacg tagcctgact A</p> <p>ggcattgtat tagcaaatc atcactagac atcgtactac acgacacgta ctacgttgt</p> <p>gcccactgag ggggaaatgt taggcgcctg cattgcgggtg gccccgcgtc ccgggagcgc</p> <p>acagcaatgc aggcgcttaa cattaccccc gagcagttct ctgcgctgct gcgggaccac</p> <p>aacctgacgc gggagcagtt catcgtctctg taccggctgc gaccgctcgt ctacacccca</p> <p>gagctgcccgg gacgcgccaa gctggccctc gtgctcacgg cgtgctcat cttcgccctg</p> <p>gcactctttg gcaatgctct ggtgtttctac gtggtgaccc gcagcaaggc catgcgcacc</p> <p>gtcaccaca tctttatctg ctcttggtgc ctcagtgacc tgctcatcac cttcttctgc</p>

510	160314	G Protein- Coupled Receptor GPR103	ENSMRPT2217 53	<p>attcccgtca ccattgtcca gaacatttcc gacaactggc tgggggggtgc tttcatttgc aagatgggtgc catttgtcca gttaccgct gttgtgacag aaatcctcac tatgacctgc attgctgtgg aaaggcacc aaggacttgg catccttita aatgaagtg gcaatacacc aaccgaaggg ctttcacaat gctaggtgtg gctgggtgg tggcagtcac cgtaggatca ccatgtggc acgtgcaaca acttgagatc aaatatgact tccatatga aaaggaacac atctgtgct tagaagagt gaccagcct cctcttatgg aagaagaac gagctgtcat tatgatgggtg ctgtcatcct ctctctctg tctctttgc tgtgtgctgg gcaccattcc atgtgtcca tatgatgatt acagtgggtg attttgaata ggaatatgat gatgtcaca tcaagatgat ttttgcctac gtaacaaat tggattttc caactccatc tgaatccca ttgtctatgc atttatgaat gaaaacttca aaaaaatgt tttgtctgca gtttgttatt gcatagtaaa taaaaccttc tctcagcac aaaggcatgg aaattcagga attacaatga tgcggaagaa agcaaaagttt tccctcagag agaattccagt ggaggaaacc aaaggagaag cattcagtga tggcaacatt gaagtcaaat tgtgtgaaca gacagaggag aagaaaaagc tcaaacgaca tcttgctctc tttaggtctg aactggctga gaattctcct ttagacagt ggcattaa</p> <p>RVGDGSLRT IHGEMSKIA RKKRAVINM VTVVAFVAVC WAPFHVHMM IEYSNFEKEY DDVTIKMIFA IVQIIGFSNS ICNPIVYAFM NENFKKNVLS AVCYICVNKT FSPAQRHGNLS GITMRKKAK FSLRNPVEE TKGEAFSDGN IEVKLCEQTE EKKKLKRHLA LFRSELAENS PLDSG</p>	Homo sapiens
511	160317	Neuropeptide FF 2 Receptor	NM_004885	<p>tctggagcca agtaatgggtg atactgatgc ttccttttct ttgcccgcgt cggattctga A gtttcacaaag aatgtacctg ggtgcccctt agcgggatat gaatagcttc ttcggaaccc cagcggccag ctggtgcctc ctggaagtgc acgtctcatc tgcaccggac aaggaggcgg ggaggagcgc cagagcactc agcgtccagc agcgcggcgg gccagcctgg agcggaaagcc tggagtggag caggcagtc gcgggggaca gacgtcggct gggattgagc cggcagactg cgaaaagttag ctggagccgg agcaggagca gaacctgttg ctgcagacgg gcttgggtgga ttctgggttc tgcggccgac agggctcgcg gggagaggtt catcatgaat gagaaatggg acacaaactc ttcagaaaac tggcatccca tctggaatgt caatgacaca agcatcatc tgtactcaga tattaatatt acctatgtga actactatct tcaccagcct caagtggcag caatcttcat ttttctctac tttctgatct tctttttgtg catgatggga aatactgtgg tttgctttat tgtaatgagg aacaaacata tgcacacagt cactaatctc ttcactctaa acctggccat aagtgttga ctagtggca tttctgcat gcctataaca ctgctggaca atattatagc aggatggcca tttggaaca cgtatgtcaa gatcagtgga ttggtccagg gaatatctgt cgcagcttca gttcttacct tagttgcaat tgctgtagat aggttccagt gtgtgggtcta cctttttaa ccaaaagctca ctatcaagac agcgtttgtc attattatga tcatctgggt cctagccatc acctattatgt ctccatctgc agtaagtta catgtgcaag aagaaaaata ttaccgagt agactcaact ccagaataa accagtcga gctactgggt gccgggaaga ctggccaaat caggaaatga ggaagatcta caccactgtg ctgtttgcca acatctacct ggctccctc tccctcattg tcatcatgta tggaggatt ggaatttca tcttcagggc tgcagttcct cacacaggca ggaagaacca ggagcagtg cactgtgtgt ccaggaaaaa gcagaagatc attaatgagc tctgtgtgt ggccctgctt ttattctct</p>	Homo sapiens

512	160317 Neuropeptide NP_004876.1 FF 2 Receptor	catggctgcc cctgtggact ctaatgatgc tctcagacta cgctgacctt tctccaaatg aactgcagat catcaacatc tacatctacc ctttttgaca ctggctggca ttcggcaaca gcagtgtaaa tcccatcatt tatggtttct tcaacagagaa ttccgcccgt ggtttccaag aagctttcca gctccagctc tgccaaaaa gagcaaaagcc tatggaagct tatacctaa aagctaaaag ccatgtgctc ataacacat ctaatcagct tgtccaggaa tctacattc aaaaacctca tggggaaacc ttgctttata ggaaaagtgc tgaaaaaacc caacaggaat tagtgatgga agaattaaaa gaaactacta acagcagtga gatttaaaa gagctagtgt gataatccta actctactac gcattatata tttaaatcca ttgctttttg tggctttgca cttcaaatct tcaaaagaat gttctaaata aaacatttac tgaaagccct ctctggcaaa aaaaataaaa ataaacaaaa atggtcataa gatcataaac aatcttatgt tgtataaaaa tagctagagt gacttagaca tgtttgcatg aataaatata tttctagaga acagttaaaa aaaaaaaaaaaa	P	Homo sapiens
513	160324 G Protein-Coupled Receptor GPR86/GPR94/P2Y13	LNQESTFQNP HGETLLYRKS AEKPPQELVM EELKETNSS EI aacagtattt tccttttcaa cacatctatt gaaagtgttg gataaatgca ggatgtaaat A atgctataaa cataaagtct gtttttaaaa aatagcattt gaaaatcatg aaggcctttt tggtttcttt tggttgata tatgtttatt ggttaacaggt gacactggaa gcaatgaaca ccacagtgat gcaaggcttc aacagatctg agcgtgccc cagagacact cggatagtagc agctggtatt ccagccctc tacacagtgg tttctctgac cggcatcctg ctgaataactt tggtctctgtg ggtgtttgtt cacatcccca gctctccac ctctcatc taccataaaa acactttggt ggcgacttg ataatgacac tcatgcttcc tttcaaaaatc ctctctgact cacacctggc accctggcag ctacagactt ttgtgtgtcg tttttcttcg gtgatatattt atgagaccat gtatgtgggc atcgtgctgt tagggctcat agcctttgac agattcctca agatcatcag acccttgaga aatatcttc taaaaaacc tgtttttgca aaaaaggctct caatcttcat ctggttcttt ttgttcttca tctcctgccc aaatatgac ttgagcaaca aggaagcaac accatgctct gtgaaaaagt gtgcttccct aaaggggcct ctggggctga aatggcatca atgtgtaaat acatatagcc agtttatctt ctggactgtt tttatcctaa tgcttggttt ttatgtggtt attgcaaaaa agtatataga tttctataga aagtcctaaa gtaaggacag aaaaaaacac aaaaagctgg aaggcaaatg atttgtgtc gtggctgtct tctttgtgtg ttttgctcca ttctattttg ccagagtccc atatactac agtcaaacca acaataagac tgactgtaga ctgcaaaaatc aactgtttat tgctaaagaa acaactctct ttttggcagc actaacatt tgtatggatc ccttaattca catattctta tgtaaaaaat tcacagaaaa gctaccatgt atgcaaggga gaaagaccac agcatcaagc caagaaaaatc atagcagtca gacagacaaac ataactttag gctgacaact gtacataggg ttaacttcta	A	Homo sapiens

514	160324	G. Protein- Coupled Receptor GPR86/GPR94/ P2Y13	NP_076403.1	<p> tttattgatg agacttcctg agataatgtg gaaatcaaat ttaaccaaga aaaaaagatt ggaacaaatg ctctcttaca ttttattatc ctggtgtaca gaaaagatta tataaaattt aaatccacat agatctattc ataagctgaa tgaaccatta ctaagagaaat gcaacaggat acaaatggcc actagaggtc attatttctt tctttctttt tttttttt aatttcaaga gcatttcact ttaacatttt ggaagaagact aaggagaaac gtatatccct acaaacctcc cctccaaa ca tctctcaca tcttttcca caattccat aacactactg cttttgtgcc ccttaaatgt agatatgtgc tgaagaaaaa aaaaaagcc caactcttga agtccattgc tgaaaactgc agccagggtg tgaagggtg gcagacttga agagtctgag gaactgaagt gggtcagcaa gaccttgaa atcttgggtg aaggattttc tcttacaat taaaaacagc ctctttcaca ttacaataat ataccatagg aggcacaagc accattatta agccactttg cttacacctt aagtgtgtac aattcaagt tgaagaatgct gtgttaacta tcttttgaa ttctccttct gtccagcaaa tactctaag atggttaaac atggcaccta ctcagcaatg ccttcctgga ccacaacccc tatccccctg cccacccctc ctcatataaa acaataactt ctactgtttg ggtgtgtgat aggtttctca atgcagatct cctttttcta gttagctata ttcttgactg catccgctaa aaatgttaaa gctctcttgag agacagacat gccagatttt cttggtatct ccataatac gacctacagt ccatggtcta cagatgtttt aaatagaatt gctattctcg atacatacaa agacgtaatt gctgacccac aatcagtaac atccatattg ggagattttt caaaggatgg tgacctgct tgtatttatt taccttggtg ttttttcttg catccttctg tgattcaaaa aagtaaaatg tggctttctg aaatgatgga taagagtcta catcttctag aaaaaataca taaaggagta gttaaagtct gtaaatgag cagagctcc aacacgacca tcgtagggtg aagccacagt tttcttccat ggcctcaag gccctagaac ttgacctact ttctggcctt acctcctagc tacttatcca tctctgaac tttatactct tgtataaatt tctaacttc agaaaatgcc atactctgtt ttggcaccac acatgtatat ttccccctgg tacacttga agactcttat coactctgta aacctatgt tgtcatcact tgggtccatga aatattacct ggccaatgc ccaccatcac ctcaaaccca atcacccct cctctgtatg ctgtcacacc tatattatta aacttatcac attgcatgt aattacttc tgacctttgt atctactctt ttagtaactg atgtatatat ctgaaaggag agattgttc attgtgcaat caataaatgt ttgataaaat aaagccc </p>	Homo sapiens
515	160329	Proteinase- Activated Receptor 4	NM_003950	<p> ctccccaggg ctggctggca agcggccctg gtgggtctgc ggggcaggg gcagccttc A tgggttatct ccaacggcgc gatctgctgc tccgcctcgg ctccagaagc tggggtcag ggtccggcga ggcaggaaagc ctgaggccac agccagagc agcctgagt cagtcatgtg ggggagactg ctctgtggc cctgtgtgt ggggttcagc ctgtctggcg gcacccagac cccagcgtc tacgacgaga gcgggagcac cggaggtggt gatgacagca cgccctcaat cctgcctgcc ccccggtgt acccaggcca agtctgtgcc aatgacagt acacctgga gctcccgac agctcacggg cactgcttct gggctgggtg cccaccaggc tgggtgccc </p>	Homo sapiens

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cagccaggga atctgaaaca ggatcaaaact ctgcttctct ggccttgcca gcactcttg
ctcggcttct tgggtgggat gcagcccag acgactgggt gtctgagatg gggctggagc

516	160329	Proteinase- Activated Receptor 4	NP_003941.1	<p> tggggctggg gctgcattcc ctggagactc actgcaagtt cctgccagg aggtgaggg caccatcc tcagtgcaca atgtgtggc ccaccaggc ccagagcctg gttggccatt ctcatgcca ccagcttctg gcttgggat gtctcttgag caaccagaat agcaccacca actctgtcc ccaaaacca tcaatagcac ggctcagcct cctgtatcc cctgactgct gggaccctc gccttccctc ctctcactg caggctgac cttctttca cttctgtca atgtcaccag ggataagtg ggacaatggg gggtgggggt ggacagtgtg tgtggggggg ttcgggtgct gcagacctg aactcccttc tgcaggatg ttggcagccg gttgtaagcc ttgcacggga cagaccacac ccaccgcaac ctcatccctc cagcactaac cacatccact ctcaaccccg tccccttcgc actgaccaca ccaccccggt tggccccgc ccccgcaact gaacactccc gccctcaacc ccgaccctc cgcactcacc tccccctgc cgtcagcccc cgccctcacc aactgacca cctcaaccc attgcgcca gtccccacca cagtgaccac accctcactg gctcgccctt gccccagta tactgacct tccccagca cttcccttcc gcacttacca ctccccagc cagccccctc cccgtgacc gctcctccag ccccgccctc ccgtacagg cagagcgccc gccacctct atgtcgtgtt ctctgactt tacgttggtg cctcctctgc caagcccca cgggagccct cctggcgctc cgaggtggg agtcgggggtg tggcaggccg cgttgggggg cggcagtggc tccgcgact caccgggccc cggggcaggg gcgcgtcca ctctgttga cgcgggtccg gcgcacagt cccggcgag tgggtgtgctg gtctgacct tgtagaagc agtggcctcg aaggtctcgg gacgaggtg gcggtgacc aagtgcagg cgcaggggtc agggaccgg cggggcggg ggtcggggc cgcgggccta cgggttctgt agtagtcta caggagact ggacgccc agctcctgcc caccacgcac tcccgagag cagggaacc cagcacgtc aggcaccgc tggggtatct tggggcagcg gcggcgag cctgaccgc ggcaggagg cccggggcgc tgagctcagg ccagaaactg gctgattca gggataccca ggacgcgtga aacacagaag aaactgtatc ccatcttctt ttttctttt acttttttt ttttttttt tctctgagac agagtctgc gctgttgccc aggctggagt gcagtgggt gatctcggt cactgcaagc tcggcctcct ggttcaaat gattctcctg cctcagctc ccaagtagct ggataacag gcgccacca ccgacccctg ctaattttt gtattttga tcaagacga gtttaccat gttggccagg ctggtctcca actcctgccc tcaagtgat cgcctcggt ccattttta tcttttgggt ccttccatcc cactgggaaa acgtctcagg tggcctctga aacaccactc ctttttgggt gttgacgc atggctgagc atgtgtgggt gggagtcagc acattcacga tactgtgcaa tcatcacctc tgtctagtta caggacggtt tctttctccc ccaagaacac cccatcgcca tcagcactca ctcccaactc cccagcccc tggcaaccac aaatctttcc aactctacgg atttgcctgt tctgggcatt tcatgtcaat ggaatcatgt actctgtgaa aaaaaaaaa aaaaaaaaa aaaaaaaaa aaaaaaaaaa aaaaaaaaa aaaaa </p>	Homo sapiens
516	160329	Proteinase- Activated Receptor 4	NP_003941.1	<p> MWGRLLWPL VLGFSLSGGT QTPSVYDESG STGGGDDSTP SILPAPRGYP GQVCANDSDT P LELPDSSRAL LLGWVPTRLV PLYGLVLV GLPANGALW VLATQAPRLP STMLLMNLAT ADLLALALP PRIAYHLRGQ RWPFGAAR LATAALYGHM YGSVLLAAV SLDRYLALVH PLRARALRGR RLALGLCAA WLMMAALALP LTLQRQTERL ARSDRVLCHD ALPLDAQASH WQPAFTCLAL LGCFLPLLAM LLCYGATLHT LAASGRRYGH ALRLTAVVLA SAVAFFVPSN LLLLLHYSDE SPSAWGNLYG AYVPSLALST LNSCVDPFYI YVSAEFRDK VRAGLFQRSP GDTVASKASA EGGSRGMGTH SLLQ </p>	

517	160330 G Protein-Coupled-Receptor TM7XN1/GPR56	NM_005682	Homo sapiens
		cggcagcagg gtctcgctct gtccacacagg ctggagtgca gtggtgtgat cttggctcat	A
		cgtaacctcc acctcccggtg ttcaagtgtat tctcatgctt cagctcccg agtagctggg	
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		ctgcagacga cactgttctt gctgagtctg ctcttctctg tccaaggtgc ccacggcagg	
		ggccacaggg aagactttcg ctcttgccgc cagcggaacc agacacacag gacgagcctc	
		cactacaac ccacaccaga cctgcgcac tccatcgaga actcgaaga ggccctcaca	
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		tcctacgtgg gctgtgtcgt ctctgccttg gccctgcttg taccattgc cgcctacctc	
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519	160387 Glucagon-Like Peptide 2 Receptor	NM_004246	<p>MTPOSILQTT LFLLSLLFLV QGAHGRGHRE DFRFCSQRNQ THRSSLHYKP TPDLRISIEN P SEELTVHAP FPAAHPASRS FPDPRGLYHF CLYWRHAGR LHLLYGKRD F LLSDKASSLL CFHQEESLA QGPPLLATSV TSWSPQNIS LPSAASFTE FHSPPHTAAH NASVDMCELK RDLQLSQFL KHPQKASRRP SAAPASQQLQ SLESKLTSVR FMGDMVSFEE DRINATVWKL QPTAGLQDLH IHSRQEEQS EIMEYSVLLP RTLFQRTKGR SGEAEKRLLL VDFSSQALFQ DKNSSQVLGE KVLGIVVQNT KVANLTEPVV SSVEVDVAVHK HYLSSLSYVG CWVSALACLV WSSAGCETVR RETQTSCFCN HLTIFYFAVLNV YTIKVHMLL LAVFLLDTSF LLSEPVALTG SEAGCRASAI TLAAYLCRV PLPCRKRPRD YTIKVHMLL YRLVVEVFGT YVPGYLLKLS AMGWGFIFL VTLVALVDVD FLHFSLLTCL SWMGLEGYNL YRLVVEVFGT YTIKVHMLL YRLVVEVFGT YVPGYLLKLS AMGWGFIFL VTLVALVDVD NYGPIILAVH RTPEGVIYPS MCWIRDSLVS YTNLGLFSL VFLFNAMLA TMVQILRLR PHTQKWSHVL TLLGLSLVLG LPWALIFFSF ASGTFQLVVL YLFSIITSEF GFLIFIWYWS MRQLQARGGPS PLKNSNDCAR LPISSGSTSS SRI</p>	Homo sapiens
519	160387 Glucagon-Like Peptide 2 Receptor	NM_004246	<p>atgaagctgg gatcgagcag ggcaggggcct ggagagaggaa gcgcgggact cctgcctggc A gtccacagac tgcccattggg catccctgcc cctcgggga ccagtcctct ctccttccac aggaagtgtc ctctctgggc cctcgggagg' ccttctctca cctcggtcct gctggtttcc atcaagcaag ttacagatc cctccttgag gaaacgactc ggaagtgggc tcagtacaaa caggcatgtc tgagagactt actcaaggaa ccttctggca tattttgtaa cgggacattt gatcagtagc tgtgtggcc tcattcttct cctggaaatg tctctgtacc ctgcccctca tacttacctt ggtggagtga agagagctca ggaaggcctc acagacactg cttggctcag gggacttggc agacgataga gaacgccag gatatttggc aggatgactc cgaatgctcc gagaaccaca gcttcaagca aaactggag cggtatgcct tgctgtcaac ctgacagctg atgtacaccg tgggatactc ctctctctt atctcctct cctcggtctt caccctcctc ttgtttcttc gaaaactcca ctgcacgcgc aactacatcc acatgaactt gtttgcttct ttcatcctga gaacctggc tgtactggtg aaggacgtcg tcttctacaa ctcttactcc aagaggcctg acaatgagaa tgggtggatg tctacctgt cagagatgct caccctcctg cgctcagtcc aggttctctt gcattactt ggggtggc attactatg gctgctggtt gaaggcctct acctccacac gctgctggag cccacagtcg tctctgagag gcggctgtgg ccagatacc tgcgtgtggg ttgggccttc cctgtgctat ttgtgtacc ctgggggttc gcccgtgcac acctggagaa cacagggtgc tggacaacaa atgggaataa gaaaatctgg tggatcatcc gaggaacctat gatgctctgt gtaacagtca attcttcat ctctctgaaa attctcaagc ttctcatttc taagctcaa gctcatcaaa tgtgcttcag agattataa tacagattgg caaatcaac actggtcctc attcctttat tgggcgttca tgagatcctc ttctctttca tcaatgatga tcaagttgaa ggatttgcaa aactatagc acttttcat cagttgacac tgagctcctt tcatgggttc ctggtggcct tgcagtatgg ttttgccaat</p>	Homo sapiens

520	160387 Glucagon-Like Peptide 2 Receptor	NP_004237.1	<p> ggagaaagta aggctgagct gcggaataac tgggtccgct tctgtgtagc ccgccaactca ggctgcagag cctgtgtcct gggaagagac ttccgggtcc tagaaaaatg tcccaagaag ctctcggaag gagatggcg tgagaagctt cggaagctgc agccctcact taacagtggg cggtccctac atctagccat gcgaggtctt gggaagctgg gcgccaagcc ccaacaggac catgcacgct ggccccggg cagcagcctg tccgagtga gtgaggggga tgtcaccatg gccaacacca tggaggagat tctggaagag agtgagatct ag MKLGSSRAGP GRGSAGLLPG VHELPMGLPA PWGTSPLSFH RKCSLWAPGR PFLTLLVLS P IKQVTGSLLE ETTRKWAQYK QACLRDLLKE PSGFICNGTF DQYVCMWPHSS PGNVSVPCPS YLPWSEESS GRAYRHCLAQ GTWQTENAT DIWQDDSECS ENHSEKQNV DRYALLSTLQL MYTVGYSFSL ISLFLALTL LFLRLKHLCTR NYIHMLFAS FILRLAVLV KDVVFYNSYS KRPDNENGWM SYLSEMSTSC RSVQVLLHYF VGANYLWLLV EGLYLHLLLE PTVLPERRLW PRYLLLGWAF PVLFWVPWGF ARAHLENTGC WTTNGNKKIW WIIRGPMMLC VTNVFFIFLK ILKLLISKLK AHQMCFRDYK YRLAKSTLV LPLLGVHEIL FSFITDDQVE GFAKLIRLFI QLTLSFHGF LVALQYGFAN GEVKAELRY WVRFLARHS GCRACVLGKD FRFLGKCPKK LSEGDAEKL RKLQPSLNSG RLLHLAMRGL GELGAQPPQD HARWPRGSSL SECSEGDVTM ANTMEEILEE SEI </p>	Homo sapiens
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LAG Seven-
Pass G-Type
Receptor 2
(CELSR2)

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SEQ ID NO:	LSID	Gene	Source ID	LPID	Peptide	SpeciesName
692	127	5-HT1A Receptor	P08908	595	CAPASFERKNERNAEAKRKM	Homo sapiens
693	127	5-HT1A Receptor	P08908	608	GRIFRAARFRIRKTVKKVE	Homo sapiens
694	127	5-HT1A Receptor	P08908	610	RIPEDRSDPDACTISK	Homo sapiens
695	127	5-HT1A Receptor	P08908	612	RHGASAPQPKKSVNGE	Homo sapiens
696	128	5-HT1B Receptor	P28222	585	KQIPNRTGKRLTRAQLTD	Homo sapiens
697	128	5-HT1B Receptor	P28222	586	SPGSTSSVTSINSRVPD	Homo sapiens
698	128	5-HT1B Receptor	P28222	598	KVRVSDALLEKKKLMA	Homo sapiens
699	128	5-HT1B Receptor	P28222	599	ANLSSAPSQNCSAKD	Homo sapiens
700	129	5-HT1D Receptor	P28221	577	IKLADSALERKRISAA	Homo sapiens
701	129	5-HT1D Receptor	P28221	588	QEASNRSLNATETSEA	Homo sapiens
702	129	5-HT1D Receptor	P28221	589	RIYRAARNRILNPPSL	Homo sapiens
703	129	5-HT1D Receptor	P28221	590	KAQEEMSDCLVNTSQIS	Homo sapiens
704	130	5-HT1E Receptor	P28566	815	RHLSNRSTDQNSFASC	Homo sapiens
705	130	5-HT1E Receptor	P28566	817	CITEASMAIRPKTITEKM	Homo sapiens
706	130	5-HT1E Receptor	P28566	818	DNDLDHPGERQQISST	Homo sapiens
707	130	5-HT1E Receptor	P28566	2738	CVSDFSTSDPTTEFEK	Homo sapiens
708	130	5-HT1E Receptor	P28566	2739	RIYHAAKSLYQKRGSSR	Homo sapiens
709	131	5-HT1F Receptor	P30939	604	ESGEKSTKSVSTSYVL	Homo sapiens
710	131	5-HT1F Receptor	P30939	606	DKCKISEMSNFWLWLG	Homo sapiens
711	131	5-HT1F Receptor	P30939	864	IAKEEVNGQVLESSE	Homo sapiens
712	131	5-HT1F Receptor	P30939	869	STVRSLSRSEFKHEKSWR	Homo sapiens
713	132	5-HT2A Receptor	CAA01675.1	1106	DAFNWTVDSERNINLSC	Homo sapiens
714	132	5-HT2A Receptor	CAA01675.1	1107	FGLQDDSKVFKEGSC	Homo sapiens
715	132	5-HT2A Receptor	CAA01675.1	1108	PGSYTGRITMQSISNEQKAC	Homo sapiens
716	132	5-HT2A Receptor	CAA01675.1	1109	CSMVALGKQHSSEASKDNSD	Homo sapiens
717	132	5-HT2A Receptor	CAA01675.1	1110	NTIPALAYKSSQLQMGQ	Homo sapiens
718	133	5-HT2B Receptor	P41595	1111	KGIETDVDPNNITC	Homo sapiens
719	133	5-HT2B Receptor	P41595	1112	CSSPEKVAMLDGSRKDKA	Homo sapiens
720	133	5-HT2B Receptor	P41595	1113	RRTSTIGKKSVQTISNE	Homo sapiens
721	133	5-HT2B Receptor	P41595	1114	CNYRATKSVKTLKRSSK	Homo sapiens
722	133	5-HT2B Receptor	P41595	1187	SGLQTESIPEEMKQIVEEQG	Homo sapiens
723	134	5-HT2C Receptor	P28335	1115	CKRNTAEENSANPNQDQNA	Homo sapiens
724	134	5-HT2C Receptor	P28335	1116	GHTTEPPGLSLDFLC	Homo sapiens
725	134	5-HT2C Receptor	P28335	1117	CNYKVEKKPPVRQIPRV	Homo sapiens
726	134	5-HT2C Receptor	P28335	1118	IGLRDEEKVFNNTTC	Homo sapiens

727	134	5-HT2C Receptor	P28335	1119	RHNEPVIEKASDNEP	Homo sapiens
728	134	5-HT2C Receptor	NP_000859.1	1826	RNAVHSFLVHLIGLLVWQCD	Homo sapiens
729	134	5-HT2C Receptor	NP_000859.1	1829	CDISVSPVAAIVTDFNTSD	Homo sapiens
730	134	5-HT2C Receptor	NP_000859.1	1830	DGGRFKFPDGVQNWPAIS	Homo sapiens
731	136	5-HT4 Receptor	CAA73107.1	654	NNIGIIDUEKRKFNQ	Homo sapiens
732	136	5-HT4 Receptor	CAA73107.1	655	ESRPQSADQHSRMR	Homo sapiens
733	136	5-HT4 Receptor	CAA73107.1	656	CDDERYRPSILGQTP	Homo sapiens
734	136	5-HT4 Receptor	CAA73107.1	657	RDAVECGGQWESQCHPPATS	Homo sapiens
735	136	5-HT4 Receptor	CAA73107.1	2682	VTAKEHAHQIQLQRAGASSESRP	Homo sapiens
736	136	5-HT4 Receptor	CAA73107.1	2683	KSFRAFLILCCDDE	Homo sapiens
737	136	5-HT4 Receptor	CAA73107.1	2684	VTAKEHAHQIQLQRAGA	Homo sapiens
738	136	5-HT4 Receptor	CAA73107.1	2685	KEHAHQIQLQRAGA	Homo sapiens
739	136	5-HT4 Receptor	CAA73107.1	2686	VTAKEHAHQIQLQR	Homo sapiens
740	138	5-HT6 Receptor	P50406	649	RTPRPGVESADSRRLATK	Homo sapiens
741	138	5-HT6 Receptor	P50406	650	CPRERQASLASPSLRIS	Homo sapiens
742	138	5-HT6 Receptor	P50406	652	PLFMRFKRALGRFLPC	Homo sapiens
743	138	5-HT6 Receptor	P50406	653	RAAAAANFFNIDPAEPE	Homo sapiens
744	139	5-HT7 Receptor	P34969	658	EVTASAPTWDAPPDNASGC	Homo sapiens
745	139	5-HT7 Receptor	P34969	659	KAARKSAKHKFGFPRVE	Homo sapiens
746	139	5-HT7 Receptor	P34969	660	CANLSRLKHERKNISIFKR	Homo sapiens
747	139	5-HT7 Receptor	P34969	663	KLAERPERPEFVLRAC	Homo sapiens
748	272	Adenosine A1 Receptor	AAAI7544.1	8	CHKPSILTVAIFLT	Homo sapiens
749	272	Adenosine A1 Receptor	AAAI7544.1	9	NGSMGEPVKEFEKVISME	Homo sapiens
750	272	Adenosine A1 Receptor	AAAI7544.1	10	NKKVSASSGDPQKYVGKELK	Homo sapiens
751	272	Adenosine A1 Receptor	AAAI7544.1	11	NDHFRCPAPPIDEDLPEER	Homo sapiens
752	272	Adenosine A1 Receptor	P25099	286	CQPKPIDEDLPEEKAE	Rattus norvegicus
753	272	Adenosine A1 Receptor	P25099	302	QPKPIDEDLPEEKAE	Rattus norvegicus
754	272	Adenosine A1 Receptor	AAAI7544.1	303	MPPSISAFQAAYIGIEVJ	Homo sapiens
755	273	Adenosine A2a Receptor	P29274	1237	QGNITGLPDVELLSHELKVC	Homo sapiens
756	273	Adenosine A2a Receptor	P29274	1238	MPIMGSSVMITVELAIA	Homo sapiens
757	273	Adenosine A2a Receptor	P29274	1239	RSHVLRQQEPPFKAAGT	Homo sapiens
758	273	Adenosine A2a Receptor	P11617	1240	RIREFRQTFRKIRSH	Canis familiaris
759	274	Adenosine A2b Receptor	P29275	676	KDSATNINCTEPWDGTTNES	Homo sapiens
760	274	Adenosine A2b Receptor	P29275	677	CRGLQRTELMDHSRTLQRE	Homo sapiens
761	274	Adenosine A2b Receptor	P29275	678	RNRDRFYTFHKISRYLLC	Homo sapiens
762	274	Adenosine A2b Receptor	P29275	679	CQADVKSGNGQAGVQP	Homo sapiens

763	274	Adenosine A2b Receptor	P29275	680	CVTLFQPAQGGKNKPKW	Homo sapiens
764	274	Adenosine A2b Receptor	P29275	2714	MILETQDALVVALELVIAAL	Homo sapiens
765	275	Adenosine A3 Receptor	P33765	683	IFYIRNKLNLNSKE	Homo sapiens
766	275	Adenosine A3 Receptor	P33765	686	NMKLTSEYHRNVTFSLC	Homo sapiens
767	275	Adenosine A3 Receptor	P33765	687	AYKIKKFETYLLIKAC	Homo sapiens
768	275	Adenosine A3 Receptor	P33765	689	TGAFYGREFTAKSLF	Homo sapiens
769	275	Adenosine A3 Receptor	P33765	2296	KRVTHRRRIWLALGLC	Homo sapiens
770	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	4	CPRVVLPEEIFFTIS	Homo sapiens
771	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	5	MGYLKPRGSFETTADDIIDS	Homo sapiens
772	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	6	RYHSIVTMRRTVVVLT	Homo sapiens
773	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	CAA46587.1	7	AFRSPELURDAFKKMIFC	Homo sapiens
774	376	Alpha 1d-adrenoceptor	AAA35496.1	12	RSTRSLEAGVKRERGKASE	Homo sapiens
775	376	Alpha 1d-adrenoceptor	AAA35496.1	13	KEPVPPDERFCGITEEAG	Homo sapiens
776	376	Alpha 1d-adrenoceptor	AAA35496.1	14	RSTEMVQRLRMEAVQ	Homo sapiens
777	376	Alpha 1d-adrenoceptor	AAA35496.1	15	PRPSCAPKSPACRTRSP	Homo sapiens
778	377	Alpha 1b-adrenoceptor	P35368	696	KEMNSKELTLRIHSK	Homo sapiens
779	377	Alpha 1b-adrenoceptor	P35368	697	GGSLERSQSRKDSLDDSGSC	Homo sapiens
780	377	Alpha 1b-adrenoceptor	P35368	698	APEPPGRRGRHDSGPL	Homo sapiens
781	377	Alpha 1b-adrenoceptor	P35368	699	KLLTEPESPGTDGGASNGGC	Homo sapiens
782	379	Alpha 1c-adrenoceptor	AAA93114.1	1245	GSGMASAKTKHFSVR	Homo sapiens
783	379	Alpha 1c-adrenoceptor	AAA93114.1	1246	RIPVGSRETFYRISKTDGVC	Homo sapiens
784	379	Alpha 1c-adrenoceptor	AAA93114.1	1247	SSMPRGSAKITVSKDQSSC	Homo sapiens
785	379	Alpha 1c-adrenoceptor	AAA93114.1	1248	ESRGLKSLKTDKSDS	Homo sapiens
786	387	Alpha 2a-adrenoceptor	P08913	1343	ERRPGLGERSAGPG	Homo sapiens
787	387	Alpha 2a-adrenoceptor	P08913	1344	PGEPAPAGPRDIDALD	Homo sapiens
788	387	Alpha 2a-adrenoceptor	P08913	1345	RGPRGKGKARASQVKPGD	Homo sapiens
789	387	Alpha 2a-adrenoceptor	P08913	1346	RPGATGIGITPAAGPGE	Homo sapiens
790	387	Alpha 2a-adrenoceptor	P08913	1347	RVGAAKASRWGRQNRE	Homo sapiens
791	388	Alpha 2b-adrenoceptor	P18089	1348	IYKGDQGGPQPRGRPQC	Homo sapiens

792	388	Alpha 2b-adrenoceptor	P18089	1349	RSNRRGPRAKGGPGQGE	Homo sapiens
793	388	Alpha 2b-adrenoceptor	P18089	1350	ASAREVNGHSKSTGEK	Homo sapiens
794	388	Alpha 2b-adrenoceptor	P18089	1351	RGVGAIGGQWRRRAH	Homo sapiens
795	389	Alpha 2c-adrenoceptor	P18825	1352	RAPVGPDGASPTENG	Homo sapiens
796	389	Alpha 2c-adrenoceptor	P18825	1353	RTGTARPRPTWSRTR	Homo sapiens
797	389	Alpha 2c-adrenoceptor	P18825	1354	ASRSPGPGGRLSRASS	Homo sapiens
798	389	Alpha 2c-adrenoceptor	P18825	1355	RSVEFFLSRRRRARSSVC	Homo sapiens
799	599	Bradykinin B1 Receptor	P46663	798	PMASSGRQRRRQARVTC	Homo sapiens
800	599	Bradykinin B1 Receptor	P46663	799	NYHILASLRTREEVSR	Homo sapiens
801	599	Bradykinin B1 Receptor	P46663	800	RVRGPKDSKTTAULT	Homo sapiens
802	599	Bradykinin B1 Receptor	P46663	801	VGRLFRTKVWELYKQC	Homo sapiens
803	600	Bradykinin B2 Receptor	AAB02793.1	794	FRIMKEYSDEGHNVAC	Homo sapiens
804	600	Bradykinin B2 Receptor	AAB02793.1	795	CTMQIMQVLRNNEMQKFKE	Homo sapiens
805	600	Bradykinin B2 Receptor	AAB02793.1	796	CQDERIIDVITQIASFM	Homo sapiens
806	600	Bradykinin B2 Receptor	AAB02793.1	797	CRSEPIQMENSMTLRIS	Homo sapiens
807	635	Beta-1 adrenoceptor	AAAS1667.1	1357	RVFREAAQKQVKKIDSC	Homo sapiens
808	635	Beta-1 adrenoceptor	AAAS1667.1	1358	CERFLGGPARPPSPS	Homo sapiens
809	635	Beta-1 adrenoceptor	AAAS1667.1	1359	ANGRAAGKRPRSLVALRE	Homo sapiens
810	635	Beta-1 adrenoceptor	AAAS1667.1	1360	CARRAARRRHATHGDRPRAS	Homo sapiens
811	635	Beta-1 adrenoceptor	AAAS1667.1	1361	CLARPGPPSPGAASD	Homo sapiens
812	635	Beta-1 adrenoceptor	AAAS1667.1	1362	CNGGAAADSDSSLDEP	Homo sapiens
813	640	Beta-2 adrenoceptor	NP_000015.1	2654	KRQLQKIDKSEGRFHV	Homo sapiens
814	640	Beta-2 adrenoceptor	NP_000015.1	2656	GEQSGYHVEQEKENKLLC	Homo sapiens
815	640	Beta-2 adrenoceptor	NP_000015.1	2662	APNRSHAPDHDVTQQR	Homo sapiens
816	640	Beta-2 adrenoceptor	NP_000015.1	2663	VPLVIMVFVYSRVFQE	Homo sapiens
817	643	Beta-3 adrenoceptor	P13945	1390	RGELGRFPPEESPAP	Homo sapiens
818	643	Beta-3 adrenoceptor	P13945	1391	SRS LAPAPVGTCAPE	Homo sapiens
819	643	Beta-3 adrenoceptor	P13945	1392	GVPACGRRPARLLPRE	Homo sapiens
820	643	Beta-3 adrenoceptor	P13945	1393	PSGVPAARSSPAQPRLC	Homo sapiens
821	688	Opsin, blue-sensitive	NP_001699.1	1753	EEEFYLFKNISSVGPWDGPQ	Homo sapiens
822	688	Opsin, blue-sensitive	NP_001699.1	1754	CGPDWYTVGTYRSESYT	Homo sapiens
823	688	Opsin, blue-sensitive	NP_001699.1	1755	NNRNHGLDLRLVTIPS	Homo sapiens
824	688	Opsin, blue-sensitive	NP_001699.1	1756	IMKMVCGKAMIDESDT	Homo sapiens
825	692	Bombesin Receptor	AAA35604.1	20	SITNDTESSSSVVSNDNTNK	Homo sapiens
826	692	Subtype-3 Bombesin Receptor	AAA35604.1	21	KAVVKPLERQPSNAILKTC	Homo sapiens

827	692	Bombesin Receptor Subtype-3	AAA35604.1	22	RDPNKNMTFESCISYPVSKK	Homo sapiens
828	692	Bombesin Receptor Subtype-3	AAA35604.1	23	RTLYKSTLINIPTEEQSHARK	Homo sapiens
829	692	Bombesin Receptor Subtype-3	AAA35604.1	24	KSFQKHFKAKQLFCCKAERPE	Homo sapiens
830	692	Bombesin Receptor Subtype-3	NP_001718.1	2286	NKGWSGDNSPGIEALC	Homo sapiens
831	692	Bombesin Receptor Subtype-3	NP_001718.1	2287	QRQPHSPNQTLISITNDIE	Homo sapiens
832	692	Bombesin Receptor Subtype-3	NP_001718.1	2288	RPEPPVADTSLTLAV	Homo sapiens
833	692	Bombesin Receptor Subtype-3	NP_001718.1	2289	SEISVTSFTGCSVKQAE DR	Homo sapiens
834	729	CXC Chemokine Receptor 5	P32302	1382	ELDRLDNYNDTSLVENHLC	Homo sapiens
835	729	CXC Chemokine Receptor 5	P32302	1383	SQGHNNNSLPRCTFSQE	Homo sapiens
836	729	CXC Chemokine Receptor 5	P32302	1384	CYGVVHRLRQAQRPP	Homo sapiens
837	729	CXC Chemokine Receptor 5	P32302	1385	CQLFPSWRRSSLESENA	Homo sapiens
838	735	C-C Chemokine Receptor 1	P32246	305	TEDYDTTTEFDYGDATPC	Homo sapiens
839	735	C-C Chemokine Receptor 1	P32246	1242	ASMPGLYFSKTQWEFTHTC	Homo sapiens
840	735	C-C Chemokine Receptor 1	P32246	1243	CSLHFPHESLREWKLFQA	Homo sapiens
841	735	C-C Chemokine Receptor 1	P32246	1244	TILSVFQDFLFHEC	Homo sapiens
842	737	C-C Chemokine Receptor 3	P51677	1386	CSALYPEDTVYSWRHF	Homo sapiens
843	737	C-C Chemokine Receptor 3	P51677	1387	PEFIFYETEELFEETLC	Homo sapiens
844	737	C-C Chemokine Receptor 3	P51677	1388	SSYQSILFGNDCERSK	Homo sapiens
845	737	C-C Chemokine Receptor 3	P51677	1389	GRYPFLPSEKLE RTS	Homo sapiens
846	737	C-C Chemokine Receptor 3	P51677	1751	DDVGLLCEKADTRALMAQFV	Homo sapiens
847	738	C-C Chemokine Receptor 4	P51680	306	MNATEVDTTQDET VNSVY	Mus musculus
848	738	C-C Chemokine Receptor 4	P51679	348	DESYSNYLYESIPKPC	Homo sapiens
849	738	C-C Chemokine Receptor 4	P51679	351	DTPSSSYTQSTM DHDLDH	Homo sapiens
850	738	C-C Chemokine Receptor 4	P51679	353	LETLELEVLGDCTFE	Homo sapiens
851	738	C-C Chemokine Receptor 4	P51679	491	RNHTYCKTKYSLNSTWK	Homo sapiens
852	741	C-C Chemokine Receptor 7	P32248	748	CQDEVTD DYGDNITVD	Homo sapiens
853	741	C-C Chemokine Receptor 7	P32248	846	PELLYSDLQRSSEQAMRC	Homo sapiens
854	741	C-C Chemokine Receptor 7	P32248	847	QLRQWSSCRHIRRSM SVE	Homo sapiens
855	741	C-C Chemokine Receptor 7	P32248	848	GVKFRNDLFLKFLD LGC	Homo sapiens
856	742	C-C Chemokine Receptor 8	P51685	359	PDIFSSPCDAELIQ TNG	Homo sapiens

857	742	C-C Chemokine Receptor 8	P51685	360	KILHQLKRCQNHNTKAIK	Homo sapiens
858	742	C-C Chemokine Receptor 8	P51685	362	SQIFNYLGRQMPRESC	Homo sapiens
859	742	C-C Chemokine Receptor 8	P51685	493	FVGEKFKHLSEIFQKSC	Homo sapiens
860	752	CXC Chemokine Receptor 3	P49682	1371	ENFSSSYDYGENSEDSC	Homo sapiens
861	752	CXC Chemokine Receptor 3	P49682	1372	CYAHILAVLLVSRGQRRLRA	Homo sapiens
862	752	CXC Chemokine Receptor 3	P49682	1373	MVLEVSDHQVLNDAEVAALL	Homo sapiens
863	752	CXC Chemokine Receptor 3	P49682	1374	CPNQRGLQRQPSRRRD	Homo sapiens
864	753	CXC Chemokine Receptor 4	P30991	1376	TEEMGSGDYDSMKEPC	Homo sapiens
865	753	CXC Chemokine Receptor 4	P30991	1377	KKLRSMTDKYRLHLSVAD	Homo sapiens
866	753	CXC Chemokine Receptor 4	P30991	1380	CIISKLSHSGHQKRAK	Homo sapiens
867	753	CXC Chemokine Receptor 4	P30991	1381	KLSKGKRGHSSVSTE	Homo sapiens
868	755	Complement Component 3a Receptor 1	AAC50657.1	25	ENRSLNIVQPPGEMNDRLD	Homo sapiens
869	755	Complement Component 3a Receptor 1	AAC50657.1	26	KIPSGFPIEDHETSPDND	Homo sapiens
870	755	Complement Component 3a Receptor 1	AAC50657.1	27	RKKARQSIQGILEAAFSEE	Homo sapiens
871	755	Complement Component 3a Receptor 1	AAC50657.1	28	PQTFQRPSADSLPRGSARLT	Homo sapiens
872	758	Complement Component 5a Receptor 1	P21730	811	DLNTPVDKTSNTLRVPD	Homo sapiens
873	758	Complement Component 5a Receptor 1	P21730	812	CGVDYSHDKRRERAIVAIRL	Homo sapiens
874	758	Complement Component 5a Receptor 1	P21730	813	CYTFILLRTWSRRATRSTK	Homo sapiens
875	758	Complement Component 5a Receptor 1	P21730	814	QGRLRKSLPSLLRNVLTE	Homo sapiens
876	767	Calcitonin Receptor-like Receptor	Q16602	841	AELEESPEDSIQLGVTR	Homo sapiens
877	767	Calcitonin Receptor-like Receptor	Q16602	843	EFVLIPWRPEGKIAEEV	Homo sapiens
878	767	Calcitonin Receptor-like Receptor	Q16602	844	RRNWNQYKIQFGNSFSNSE	Homo sapiens
879	767	Calcitonin Receptor-like Receptor	Q16602	845	RSASYTVSTISDGPYSHDC	Homo sapiens
880	832	Cannabinoid Receptor 1	AAB18200.1	29	NDIQYEDIKGDMAKLG	Homo sapiens
881	832	Cannabinoid Receptor 1	AAB18200.1	30	KENEENIQCCGENFMIDIE	Homo sapiens
882	832	Cannabinoid Receptor 1	AAB18200.1	31	EDGKVQVTRPDQARMIDIR	Homo sapiens

883	832	Cannabinoid Receptor 1	AAB18200.1	32	CEGTAQPLDNSMGDSD	Homo sapiens
884	832	Cannabinoid Receptor 1	AAB18200.1	274	MKSILDGLADTFR	Homo sapiens
885	832	Cannabinoid Receptor 1	AAB18200.1	297	NKLSLFFKEENIQC	Homo sapiens
886	833	Cannabinoid Receptor 2	CAA52376.1	33	KDGLDSNPMKDVMIILSGPQK	Homo sapiens
887	833	Cannabinoid Receptor 2	CAA52376.1	34	QDRQVPGMARMRLDVLAKT	Homo sapiens
888	833	Cannabinoid Receptor 2	CAA52376.1	35	KEAPRSSVTETADGK	Homo sapiens
889	833	Cannabinoid Receptor 2	CAA52376.1	36	RSGEIRSSAHCLAHWKCC	Homo sapiens
890	922	Leukocyte Antigen CD97	NP_001775.1	2644	GRDPPAKDVMPPGRQELLC	Homo sapiens
891	922	Leukocyte Antigen CD97	NP_001775.1	2646	CSPGYEPVSGAKTFKN	Homo sapiens
892	922	Leukocyte Antigen CD97	NP_001775.1	2647	FSSFSEIITPTETC	Homo sapiens
893	922	Leukocyte Antigen CD97	NP_001775.1	2648	CRPGWKPRHGIPNNQK	Homo sapiens
894	922	Leukocyte Antigen CD97	NP_001775.1	2649	DGEAGRDPPAKDVMPPGR	Homo sapiens
895	922	Leukocyte Antigen CD97	NP_001775.1	2650	ANASLNLSKKQAELE	Homo sapiens
896	922	Leukocyte Antigen CD97	NP_001775.1	2651	RLSAVNSIFLSHNNTKE	Homo sapiens
897	922	Leukocyte Antigen CD97	NP_001775.1	2652	KLTKGFSEINPDMKKL	Homo sapiens
898	922	Leukocyte Antigen CD97	NP_001775.1	2680	KLVDLMEAPGDVEAL	Homo sapiens
899	922	Leukocyte Antigen CD97	NP_001775.1	2681	RFFDKVQDLGRDSKTS	Homo sapiens
900	941	EMR1 Hormone Receptor	Q14246	1180	RAEYLDIESKVINKEC	Homo sapiens
901	941	EMR1 Hormone Receptor	Q14246	2675	CVMHSWEGHIRPTRKPNK	Homo sapiens
902	941	EMR1 Hormone Receptor	Q14246	2677	CLNGQVREYKRWITGKTP	Homo sapiens
903	941	EMR1 Hormone Receptor	Q14246	2678	CLNGQVREYKRWITGK	Homo sapiens
904	941	EMR1 Hormone Receptor	Q14246	2679	SGHLSCQGLKASCE	Homo sapiens
905	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1183	GTALANGTGELSEHQQ	Homo sapiens
906	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1184	ADSLIEVFNLHERWYD	Homo sapiens
907	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1185	VRAHRHRLRPRRQKA	Homo sapiens
908	965	G Protein-Coupled Receptor GPR30	CAA67133.1	1186	DKLRLYIEQKTNLPALNRF	Homo sapiens
909	978	Cholecystokinin A Receptor	P32238	820	AKERKPSSTSSGKYEDSDGC	Homo sapiens
910	978	Cholecystokinin A Receptor	P32238	821	CYLQKTRPPRKLELRQ	Homo sapiens
911	978	Cholecystokinin A Receptor	P32238	822	SANAWRAYDTASAERR	Homo sapiens
912	978	Cholecystokinin A Receptor	P32238	823	CPNPGPPGARGEVEEEE	Homo sapiens
913	1103	Corticotropin releasing factor Receptor 2	Q13324	453	CEPILDDKQRKYDLHYRIAL	Homo sapiens
914	1103	Corticotropin releasing	Q13324	502	QLVDHEVHESNEVWC	Homo sapiens

915	1103	factor Receptor 2	Q13324	505	DPEGPYSYCNITLDQIGTCW	Homo sapiens
916	1103	Corticotropin releasing factor Receptor 2	LR43	507	ALLEQYCHTIMLTNLG	Homo sapiens
917	1240	factor Receptor 2				
918	1240	Dopamine Receptor D1	CAA41734.1	41	SSHHEPRGSISKEC	Homo sapiens
919	1240	Dopamine Receptor D1	CAA41734.1	42	KAKPTSPSDGNATSLAETID	Homo sapiens
920	1240	Dopamine Receptor D1	CAA41734.1	43	CSQPESSEFKMSFKRE	Homo sapiens
921	1240	Dopamine Receptor D1	CAA41734.1	44	EDLKKEEAAGIARPLEK	Homo sapiens
922	1241	Dopamine Receptor D5	P21918	1407	PWEEDFWEPDVNAENC	Homo sapiens
923	1241	Dopamine Receptor D5	P21918	1408	CAPDLSRASIKKETK	Homo sapiens
924	1241	Dopamine Receptor D5	P21918	1409	PNAVTPGNREVDNDEE	Homo sapiens
925	1241	Dopamine Receptor D5	P21918	1410	QTSPDGDPAESVWELDC	Homo sapiens
926	1242	Dopamine Receptor D2	P14416	1403	KRSSRAFRHLRAPLKGNC	Homo sapiens
927	1242	Dopamine Receptor D2	P14416	1404	CTVIMKSNSEFPVNRVRV	Homo sapiens
928	1242	Dopamine Receptor D2	P14416	1405	KPEKNHGAKOHPIAK	Homo sapiens
929	1243	Dopamine Receptor D3	P35462	1406	GKTRISLKTMSRRKLSQQKE	Homo sapiens
930	1243	Dopamine Receptor D3	P35462	1398	KQRRRKRLIRQNSQC	Homo sapiens
931	1243	Dopamine Receptor D3	P35462	1399	CNSVRPGFPQQTLSPDP	Homo sapiens
932	1243	Dopamine Receptor D3	P35462	1400	CQDTALGGPGFQERIGE	Homo sapiens
933	1243	Dopamine Receptor D3	P35462	1401	KREEKTRNSLSPTIAP	Homo sapiens
934	1244	Dopamine Receptor D4	P21917	1402	STSLKLGPLQPRGVPLRE	Homo sapiens
935	1244	Dopamine Receptor D4	P21917	1394	VAVAVPLRYNRQGGSR	Homo sapiens
936	1244	Dopamine Receptor D4	P21917	1395	EVARRAKLHGRAPRRP	Homo sapiens
937	1244	Dopamine Receptor D4	P21917	1396	PPSPTPPAPRLPQDPC	Homo sapiens
938	1267	Dopamine Receptor D4	P21917	1397	PPQTPPQTRRRRAKITGRE	Homo sapiens
		Opioid Receptor, delta 1 (OPRD1)	AAA18789.1	222	DAYPSAFPSAGANASGP	Homo sapiens
939	1267	Opioid Receptor, delta 1 (OPRD1)	AAA18789.1	224	LVDIRRDPLVVAALHLC	Homo sapiens
940	1267	Opioid Receptor, delta 1 (OPRD1)	AAA18789.1	225	KRCFRQLCRKPCGRPD	Homo sapiens
941	1267	Opioid Receptor, delta 1 (OPRD1)	AAA18789.1	226	SRPREATARERVATAC	Homo sapiens
942	1424	Duffy Antigen	AAC50055.1	1411	TENSSQLDFEDVWNSS	Homo sapiens
943	1424	Duffy Antigen	AAC50055.1	1412	NDSFPDGDYDANILEAAPC	Homo sapiens
944	1424	Duffy Antigen	AAC50055.1	1413	CHASLGHRLGAGQVPG	Homo sapiens

945	1424	Duffy Antigen	AAC50055.1	1415	FGAKGLKKALGMGPGP	Homo sapiens
946	1451	EBV-Induced Gene 2	AAA35924.1	45	KQEAERITCMEYPNFEET	Homo sapiens
947	1451	EBV-Induced Gene 2	AAA35924.1	46	KLFRTAKGNPLTEKSGVNKK	Homo sapiens
948	1451	EBV-Induced Gene 2	AAA35924.1	47	KSAPEENSREMITETQM	Homo sapiens
949	1451	EBV-Induced Gene 2	AAA35924.1	48	CKGYKRKV/MRMLKRQ	Homo sapiens
950	1486	Endothelin B Receptor	BAA14398.1	54	GEERGFPDRATPLLQTAE	Homo sapiens
951	1486	Endothelin B Receptor	BAA14398.1	55	RS LAPAEVPGDRIAGSP	Homo sapiens
952	1486	Endothelin B Receptor	BAA14398.1	56	PTISPPPCQGGPIEKE	Homo sapiens
953	1486	Endothelin B Receptor	BAA14398.1	57	EEKQSLEEKQSCCLKFKAND	Homo sapiens
954	1488	Endothelin A Receptor	AAB25530.1	49	RYSNLSNHVDDFTFRGTE	Homo sapiens
955	1488	Endothelin A Receptor	AAB25530.1	50	NRRNGSLRIALSEHLK	Homo sapiens
956	1488	Endothelin A Receptor	AAB25530.1	51	EYRGEQHKTCMLNATSK	Homo sapiens
957	1488	Endothelin A Receptor	AAB25530.1	53	KNHDQNNHNIDRSSHKD	Homo sapiens
958	1598	Calcium-Sensing Receptor (CASR)	P41180	1425	RPGIEKFREEAEERDIC	Homo sapiens
959	1598	Calcium-Sensing Receptor (CASR)	P41180	1426	CHLQEGAKGPLPVDIFUR	Homo sapiens
960	1598	Calcium-Sensing Receptor (CASR)	P41180	1427	GHEESGDRFSNSTAFRLC	Homo sapiens
961	1598	Calcium-Sensing Receptor (CASR)	P41180	1428	KGIIEGEPTCCFECVECPDG	Homo sapiens
962	1598	Calcium-Sensing Receptor (CASR)	P41180	1429	CSTAAHAFKVAARATLRNS	Homo sapiens
963	1598	Calcium-Sensing Receptor (CASR)	P41180	1430	PQKNAMAHNRNTHQNSLE	Homo sapiens
964	1598	Calcium-Sensing Receptor (CASR)	P41180	1431	RPEVEDPEELSPALVVSSQ	Homo sapiens
965	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1878	ASWGGTPEERLKV/AITMLTA	Homo sapiens
966	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1879	SEDSAPTNDIAANSAS	Homo sapiens
967	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1880	SVESAGYTVLRILPLVL	Homo sapiens
968	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	1881	PVFLFLTITPNGD	Homo sapiens
969	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	2612	EERLKV/AITMLTARGIIRFV	Homo sapiens
970	1676	Formyl Peptide Receptor-Like Receptor	NP_001453.1	2613	ERALSEDSAPTNDIAANSAS	Homo sapiens

991	1762	Galanin Receptor GalR1	AAA50767.1	194	KKLKNMSKKSEASKKTAQ	Homo sapiens
992	1762	Galanin Receptor GalR1	AAA50767.1	195	GNSLVITVLARSKP	Homo sapiens
993	1762	Galanin Receptor GalR1	AAA50767.1	196	RKDSHLSDTKENKSRID	Homo sapiens
994	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1250	QTAGELYQRWERYRREC	Homo sapiens
995	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1251	CENPEKNEAFDQRILER	Homo sapiens
996	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1253	CRLRSLGEEQRQLPERAFR	Homo sapiens
997	1808	Gastric Inhibitory Polypeptide Receptor	P48546	1276	PTSRGLSSGTLPGPGNEA	Homo sapiens
998	1813	Gastrin-Releasing Peptide Receptor	P30550	829	CNISSHSADLPVNDWWSHPG	Homo sapiens
999	1813	Gastrin-Releasing Peptide Receptor	P30550	830	SDLHPFHEESTNQTFISC	Homo sapiens
1000	1813	Gastrin-Releasing Peptide Receptor	P30550	831	YNLPVEGNIHVKKQIES	Homo sapiens
1001	1813	Gastrin-Releasing Peptide Receptor	P30550	832	CQPGLIIRSHSTGRSTT	Homo sapiens
1002	1814	Cholecystokinin B Receptor	Q16144	1281	CEPRIRGAGTRELEAIR	Homo sapiens
1003	1814	Cholecystokinin B Receptor	Q16144	1282	RVRNQGGLPGAVHQNGRC	Homo sapiens
1004	1814	Cholecystokinin B Receptor	Q16144	1283	LRFDGSDSDSQSRVR	Homo sapiens
1005	1814	Cholecystokinin B Receptor	Q16144	1284	CRPETGAVGKDSGCV	Homo sapiens
1006	1834	Glucagon Receptor	P47871	837	DGLLRTRYSQKIGDDL	Homo sapiens
1007	1834	Glucagon Receptor	P47871	838	CGPDGQWVRGPRGQPWWDAS	Homo sapiens
1008	1834	Glucagon Receptor	P47871	839	CQMDGEEIEVQKEVAKMYSS	Homo sapiens
1009	1834	Glucagon Receptor	P47871	840	TSNHRASSSPGHGPPSKE	Homo sapiens
1010	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	206	KLQKWTQKKEKGKLSRMK	Homo sapiens
1011	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	207	DRSLAIRPLALKNSKVGQ	Homo sapiens
1012	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	208	RMIHLADSSGQTKVFSQC	Homo sapiens
1013	1925	Gonadotropin-Releasing Hormone Receptor	AAA35917.1	209	DPHELQLNGSKNNIPRARLK	Homo sapiens
1014	1945	Opsin, green-sensitive	NP_000504.1	1746	QRLAGRHPQDSYEDSTQSS	Homo sapiens
1015	1945	Opsin, green-sensitive	NP_000504.1	1747	CKPFGNVRFDKLAIVG	Homo sapiens
1016	1945	Opsin, green-sensitive	NP_000504.1	1748	KTSCGPDVFGSSYPGVQS	Homo sapiens

1017	1945	Opsin, green-sensitive	NP_000504.1	1750	CILQLFGKKVDDGSELSS	Homo sapiens
1018	1945	Opsin, green-sensitive	NP_000504.1	1767	STRGPFEGPNYHIAPR	Homo sapiens
1019	1945	Opsin, green-sensitive	NP_000504.1	1768	TNGLVLAATMKFKILR	Homo sapiens
1020	1945	Opsin, green-sensitive	NP_000504.1	1769	ELSSASKTEVSSVSSVSP	Homo sapiens
1021	1951	Growth Hormone	Q92847	581	ADLDWDASPGNDSLGD	Homo sapiens
1022	1951	Secretagogue Receptor	Q92847	582	GVEHENGTDPWDINEC	Homo sapiens
1023	1951	Secretagogue Receptor	Q92847	583	KLWRRRRRGDAVVGASL	Homo sapiens
1024	1951	Secretagogue Receptor	Q92847	584	SQRKLSTLKDESSRAW	Homo sapiens
1025	1954	Secretagogue Receptor	Q02643	833	REDESACLQAAEEMPNTILG	Homo sapiens
1026	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	834	CPDFFSHFSSES GAVKRD	Homo sapiens
1027	1954	Hormone Receptor	Q02643	835	VRKLEPAQGS LHTQSQ	Homo sapiens
1028	1954	Growth Hormone-Releasing Hormone Receptor	Q02643	836	RTEISRKVWHGHDPPELL	Homo sapiens
1029	2120	Histamine H1 Receptor	P35367	1167	GWNHFMQQTSVRREDKC	Homo sapiens
1030	2120	Histamine H1 Receptor	P35367	1168	CQRELINRSLPSFSEIKLR	Homo sapiens
1031	2120	Histamine H1 Receptor	P35367	1169	AGGGSVLKSPSQTPKE	Homo sapiens
1032	2120	Histamine H1 Receptor	P35367	1170	KSPVVFSEQEDDREVDKLYC	Homo sapiens
1033	2120	Histamine H1 Receptor	P35367	1171	TAPGKGKLRSGSNTGLD	Homo sapiens
1034	2120	Histamine H1 Receptor	P35367	1172	KRLRSHSRQVVSGLHMNRE	Homo sapiens
1035	2121	Histamine H2 Receptor	P25021	1173	NSRNETSKGNHTSKC	Homo sapiens
1036	2121	Histamine H2 Receptor	P25021	1174	CITYYRIFKVARDDQAKR	Homo sapiens
1037	2121	Histamine H2 Receptor	P25021	1175	RDQAKRINHSSWKAA	Homo sapiens
1038	2121	Histamine H2 Receptor	P25021	1176	TAFVYRGLRGDDAINE	Homo sapiens
1039	2121	Histamine H2 Receptor	P25021	1177	HKTSLSNASQLSRTQSRE	Homo sapiens
1040	2783	Oploid Receptor, kappa 1 (OPRK1)	AAA63906.1	227	DSNGSAGSEDAQLEPA	Homo sapiens
1041	2783	Oploid Receptor, kappa 1 (OPRK1)	AAA63906.1	228	KVREDVDVIECSLQFPDD	Homo sapiens
1042	2783	Oploid Receptor, kappa 1 (OPRK1)	AAA63906.1	229	RNTVQDPAYLRDIDGMNK	Homo sapiens
1043	2783	Oploid Receptor, kappa 1 (OPRK1)	AAA63906.1	230	CFPLKMRMERQSTSRVRN	Homo sapiens

1044	2964	(OPRK1) Luteinizing Hormone/Choriogonadotropin Receptor	Q14751	1432	CNTGIRKFPDVTKVFSSEN	Homo sapiens
1045	2964	Luteinizing Hormone/Choriogonadotropin Receptor	Q14751	1433	KMHNGAFRGATGPKILD	Homo sapiens
1046	2964	Luteinizing Hormone/Choriogonadotropin Receptor	Q14751	1434	CESTVRKVSINKLYSS	Homo sapiens
1047	2964	Luteinizing Hormone/Choriogonadotropin Receptor	Q14751	1435	FAVRNPELMATNKDTK	Homo sapiens
1048	2964	Luteinizing Hormone/Choriogonadotropin Receptor	Q14751	1436	CKRRAELYRRKDFSAYTSN	Homo sapiens
1049	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	210	ERHITVFRMQLHTRMSNRR	Homo sapiens
1050	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	211	RQRTMRMSRHSSGPRRNRD	Homo sapiens
1051	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	212	KHLATEWNTVSKLVM	Homo sapiens
1052	2976	Lysophosphatidic Acid Receptor Edg2	AAC51139.1	213	ENPTGPTESDRSASSLN	Homo sapiens
1053	3038	G Protein-Coupled Receptor MRG	AAB21255.1	184	ESQISLSCSLCHSGDQEAQ	Homo sapiens
1054	3038	G Protein-Coupled Receptor MRG	AAB21255.1	185	QQQKATRVYAVVQISAPM	Homo sapiens
1055	3038	G Protein-Coupled Receptor MRG	AAB21255.1	186	DKPEVGRNKKAAAGIDPME	Homo sapiens
1056	3038	G Protein-Coupled Receptor MRG	AAB21255.1	187	EQPHSTQHVENLLPREHRVD	Homo sapiens
1057	3057	Melanocortin 3 Receptor (MC3R)	P41968	451	RLHVKRIAALPPADGVAPQ	Homo sapiens
1058	3057	Melanocortin 3 Receptor (MC3R)	P41968	452	DPLUYAFRSLELRNTFRE	Homo sapiens
1059	3057	Melanocortin 3 Receptor (MC3R)	P41968	562	QAPFFSNQSSSAFCEQVFI	Homo sapiens
1060	3057	Melanocortin 3 Receptor (MC3R)	P41968	563	IVHSDYLTFEDQFIQHMDNI	Homo sapiens

1061	3058	(MC3R) Melanocortin 4 Receptor (MC4R)	AAB33341.1	1032	HSNASESLGKGYSDGGC	Homo sapiens
1062	3058	Melanocortin 4 Receptor (MC4R)	AAB33341.1	1033	KRIAVLPGTGAIKQGA	Homo sapiens
1063	3058	Melanocortin 4 Receptor (MC4R)	AAB33341.1	1035	NSTDIDAQSFTVNIDN	Homo sapiens
1064	3058	Melanocortin 4 Receptor (MC4R)	AAB33341.1	1469	NSTHRGMHTSLHLWNRSSYR	Homo sapiens
1065	3059	Melanocortin 5 Receptor (MC5R)	P33032	1022	ATEGNLSGPNVKNKSSPC	Homo sapiens
1066	3059	Melanocortin 5 Receptor (MC5R)	P33032	1024	NKHLVIADAFVRHIDN	Homo sapiens
1067	3059	Melanocortin 5 Receptor (MC5R)	P33032	1025	MNSSFHLHFLDLNLNAT	Homo sapiens
1068	3059	Melanocortin 5 Receptor (MC5R)	P33032	1026	RYHHIMTARRSGAIIAG	Homo sapiens
1069	3061	Melanocortin 1 Receptor (MC1R)	AAD41352.1	1036	QGSQRRLLGSLNSTPT	Homo sapiens
1070	3061	Melanocortin 1 Receptor (MC1R)	AAD41352.1	1038	EAGALVARAAVLQQLD	Homo sapiens
1071	3061	Melanocortin 1 Receptor (MC1R)	AAD41352.1	1039	ALRYHSIVTLPRARQA	Homo sapiens
1072	3061	Melanocortin 1 Receptor (MC1R)	AAD41352.1	1040	CQHAGQGIARLHKRQRP	Homo sapiens
1073	3079	Melatonin Receptor type 1a	AAB17720.1	214	HSLKYDKLYSSKNSLC	Homo sapiens
1074	3079	Melatonin Receptor type 1a	AAB17720.1	215	CTARVFFVDSSNDVADR	Homo sapiens
1075	3079	Melatonin Receptor type 1a	AAB17720.1	216	QVRQRVKPDRKPKLKP	Homo sapiens
1076	3079	Melatonin Receptor type 1a	AAB17720.1	217	DSSNDVADRVKWKPSPLMTN	Homo sapiens
1077	3080	Melatonin Receptor type 1b	P49286	930	AVRPGWSGAGSARPSR	Homo sapiens
1078	3080	Melatonin Receptor type 1b	P49286	931	LVAFYDGGWALGEEHC	Homo sapiens
1079	3080	Melatonin Receptor type 1b	P49286	932	LVLQARRKAKPESRLC	Homo sapiens
1080	3080	Melatonin Receptor type 1b	P49286	933	CIGDASKGSHAEGLQSPA	Homo sapiens
1081	3080	Melatonin Receptor type 1b	P49286	934	QEMAPQIPEGLFVTSY	Homo sapiens
1082	3081	Melatonin-Related Receptor	Q13585	751	LAARDPAGQNPDNQLAE	Homo sapiens
1083	3081	Melatonin-Related Receptor	Q13585	752	ARARAHARDQAREQDRAHAC	Homo sapiens
1084	3081	Melatonin-Related Receptor	Q13585	753	DRASGHPKPHSRSSAY	Homo sapiens
1085	3081	Melatonin-Related Receptor	Q13585	754	HPKPAADNPESLASHC	Homo sapiens

1086	3081	Melatonin-Related Receptor	Q13585	755	DDSDLPESASSPAAGPT	Homo sapiens
1087	3093	Metabotropic Glutamate Receptor 1	Q13255	879	DDYKIQMNKSGVVRVC	Homo sapiens
1088	3093	Metabotropic Glutamate Receptor 1	Q13255	880	CRSNTFLNIFRRKKAG	Homo sapiens
1089	3093	Metabotropic Glutamate Receptor 1	Q13255	881	DTSTKILYNVEEEDA	Homo sapiens
1090	3093	Metabotropic Glutamate Receptor 1	Q13255	882	ERFKLLQEVVVEHERE	Homo sapiens
1091	3094	Metabotropic Glutamate Receptor 2	Q14416	891	DFVRASLSRGADGSRHIC	Homo sapiens
1092	3094	Metabotropic Glutamate Receptor 2	Q14416	892	CVATSEKVGGRAMSRAAFEG	Homo sapiens
1093	3094	Metabotropic Glutamate Receptor 2	Q14416	893	CAAHSLRAVPFEQESK	Homo sapiens
1094	3094	Metabotropic Glutamate Receptor 2	Q14416	894	CDAMRPVNGRRLYKDF	Homo sapiens
1095	3094	Metabotropic Glutamate Receptor 2	Q14416	895	DAPFRPADTHNEVRFDR	Homo sapiens
1096	3094	Metabotropic Glutamate Receptor 2	Q14416	896	GKETAPERREVVTLRC	Homo sapiens
1097	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	897	GGLFPINEKGTGTEEC	Homo sapiens
1098	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	898	EFVRASLTIVDEAEYMC	Homo sapiens
1099	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	899	RSNIRKSYDSVIRELL	Homo sapiens
1100	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	900	CDKHLAIDSSNVEQES	Homo sapiens
1101	3095	Metabotropic Glutamate Receptor 3	CAA54796.1	902	GTRRYTLAEKRETVILKC	Homo sapiens
1102	3096	Metabotropic Glutamate Receptor 4	Q14833	909	PSSLGKPKGHPHMINIRID	Homo sapiens
1103	3096	Metabotropic Glutamate Receptor 4	Q14833	910	CGSGGPPITKPERVWG	Homo sapiens
1104	3096	Metabotropic Glutamate Receptor 4	Q14833	911	CKLSRHALKKGSHVKK	Homo sapiens
1105	3096	Metabotropic Glutamate Receptor 4	Q14833	913	CPRMDPVDGTQLLKYI	Homo sapiens

1106	3096	Metabotropic Glutamate Receptor 4	Q14833	914	RIERMHWPGSGGQLPRIC	Homo sapiens
1107	3097	Metabotropic Glutamate Receptor 5	P41594	883	KDYFDYINVGSWDNGEL	Homo sapiens
1108	3097	Metabotropic Glutamate Receptor 5	P41594	884	KMDDDEVWSKKSNIIRVC	Homo sapiens
1109	3097	Metabotropic Glutamate Receptor 5	P41594	885	GETLRYKDRRLAQHKSEIC	Homo sapiens
1110	3097	Metabotropic Glutamate Receptor 5	P41594	886	NPNQITAVIKPFPKSTE	Homo sapiens
1111	3097	Metabotropic Glutamate Receptor 5	P41594	887	KALYDVAEAEHFPAPA	Homo sapiens
1112	3097	Metabotropic Glutamate Receptor 5	P41594	888	RSPSPITLSHRAGSASRTD	Homo sapiens
1113	3097	Metabotropic Glutamate Receptor 5	P41594	889	RESPAAGPEAAAAKPD	Homo sapiens
1114	3098	Metabotropic Glutamate Receptor 6	O15303	903	QALIRGRGDGDEVGVRC	Homo sapiens
1115	3098	Metabotropic Glutamate Receptor 6	O15303	904	KLTSSTGTSDDSTRKC	Homo sapiens
1116	3098	Metabotropic Glutamate Receptor 6	O15303	905	DVEALQWSGDPHEVPSSLC	Homo sapiens
1117	3098	Metabotropic Glutamate Receptor 6	O15303	906	RFQVDEFTCEACPGDM	Homo sapiens
1118	3098	Metabotropic Glutamate Receptor 6	O15303	907	GARPPHSVIDYEEQRT	Homo sapiens
1119	3099	Metabotropic Glutamate Receptor 7	Q14831	917	CIAQSVRIPQERKDRITDFD	Homo sapiens
1120	3099	Metabotropic Glutamate Receptor 7	Q14831	918	NDEDIKQILAAAKRAD	Homo sapiens
1121	3099	Metabotropic Glutamate Receptor 7	Q14831	921	NIEDMQWGKGVREIPASVC	Homo sapiens
1122	3099	Metabotropic Glutamate Receptor 7	Q14831	2693	IKQLLDTPNRAVVI	Homo sapiens
1123	3099	Metabotropic Glutamate Receptor 7	Q14831	2694	DPPNIIDYDEHKTM	Homo sapiens
1124	3100	Metabotropic Glutamate Receptor 8	O00222	922	CANGDPPIFTKPKIS	Homo sapiens
1125	3100	Metabotropic Glutamate	O00222	923	CPRMSTIDGKELGYIRA	Homo sapiens

1126	3100	Receptor 8				924	KVEDMQWAHREHTHPASVC	Homo sapiens
1127	3100	Metabotropic Glutamate Receptor 8	O00222			925	CESLETNISSTKITYSYS	Homo sapiens
1128	3100	Metabotropic Glutamate Receptor 8	O00222			1894	KFYWILTMQRTHSQEVASH	Homo sapiens
1129	3212	Opioid mu-type Receptor	AAA20580.1			231	DGNLSDPCGPNRTNGLGRDS	Homo sapiens
1130	3212	Opioid mu-type Receptor	AAA20580.1			232	DRTNHQLENLEAETAPLP	Homo sapiens
1131	3212	Opioid mu-type Receptor	AAA20580.1			233	IKALVIPETTFQTVS	Homo sapiens
1132	3212	Opioid mu-type Receptor	AAA20580.1			234	RIRQNTRDHPSTANTVDR	Homo sapiens
1133	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1			1325	SERSQPGAEGSPETPPGRC	Homo sapiens
1134	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1			1326	CRAPRLLLQAYSWKEEE	Homo sapiens
1135	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1			1327	SSEGEPEGSEVVVKMP	Homo sapiens
1136	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1			1328	KQPPRSSPNTVKRPTKKGRD	Homo sapiens
1137	3223	Muscarinic acetylcholine Receptor M1	AAA35686.1			1329	CRWDKRRWRKIPKRPGS	Homo sapiens
1138	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1			1330	EHNKIQNGKAPRDPVTENC	Homo sapiens
1139	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1			1331	DSTSVSAVASNMIRDDE	Homo sapiens
1140	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1			1332	ENTVSTSLGHSKDENSQJIC	Homo sapiens
1141	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1			1333	DEKQNVIVARKIVKMTK	Homo sapiens
1142	3224	Muscarinic acetylcholine Receptor M2	AAA51570.1			1831	RIKKDKKEPVANQDPVPSL	Homo sapiens
1143	3226	Muscarinic acetylcholine Receptor M4	AAA51571.1			218	SRSRVHKHRPEGPKEKKAKT	Homo sapiens
1144	3226	Muscarinic acetylcholine Receptor M4	AAA51571.1			219	KKPRPGGRPGGLRNGKLEEA	Homo sapiens
1145	3226	Muscarinic acetylcholine Receptor M4	AAA51571.1			220	DKDTSNESSSGSATQNTKER	Homo sapiens
1146	3226	Muscarinic acetylcholine Receptor M4	AAA51571.1			221	RPAAINVARKFASIRNQVRK	Homo sapiens

1147	3227	Muscarinic Acetylcholine Receptor M5	P08912	1334	KAEKRKPAHRAFRSC	Homo sapiens
1148	3227	Muscarinic Acetylcholine Receptor M5	P08912	1335	CSSYPSEDEDKPAID	Homo sapiens
1149	3227	Muscarinic Acetylcholine Receptor M5	P08912	1336	KESPGEEFSAEETETIV	Homo sapiens
1150	3227	Muscarinic Acetylcholine Receptor M5	P08912	1337	KFRLVVKADGNQETNNGC	Homo sapiens
1151	3227	Muscarinic Acetylcholine Receptor M5	P08912	1338	KEPSTKGLNPNPSHQM	Homo sapiens
1152	3378	Tachykinin Receptor 3	NP_001050.1	1757	PAAETWIDGGGVGAD	Homo sapiens
1153	3378	Tachykinin Receptor 3	NP_001050.1	1759	PSQPWANLNGFVQPSWR	Homo sapiens
1154	3378	Tachykinin Receptor 3	NP_001050.1	1760	SRKKRATRPDPFNGC	Homo sapiens
1155	3378	Tachykinin Receptor 3	NP_001050.1	2265	ADAVNLTAALAGAA	Homo sapiens
1156	3378	Tachykinin Receptor 3	NP_001050.1	2290	SPSALGLPVASAPSQP	Homo sapiens
1157	3380	Neuromedin B Receptor	P28336	824	ERDFLPASDGTITELVIRC	Homo sapiens
1158	3380	Neuromedin B Receptor	P28336	825	KTUKSAHNLPGEYNE	Homo sapiens
1159	3380	Neuromedin B Receptor	P28336	826	SEVARISLDNSSFAC	Homo sapiens
1160	3380	Neuromedin B Receptor	P28336	828	CGRKSYQERGTSYLLSSA	Homo sapiens
1161	3404	Neuropeptide Y Receptor Type 2	P49146	1057	RGELVPDPEPELDST	Homo sapiens
1162	3404	Neuropeptide Y Receptor Type 2	P49146	1058	CIVYHLESKISKRIIF	Homo sapiens
1163	3404	Neuropeptide Y Receptor Type 2	P49146	1059	REYSLEIIPDFEIVAC	Homo sapiens
1164	3404	Neuropeptide Y Receptor Type 2	P49146	1060	NDHYHQRRQKTKMLVC	Homo sapiens
1165	3404	Neuropeptide Y Receptor Type 2	P49146	1061	CEQRDLAIHSEVSVTFKAKK	Homo sapiens
1166	3404	Neuropeptide Y Receptor Type 2	P49146	2297	MGPIGAEDENQITVEEMKVE	Homo sapiens
1167	3404	Neuropeptide Y Receptor Type 2	P49146	2298	SEVSVTFKAKKNLEVRKNSG	Homo sapiens
1168	3405	Neuropeptide Y Receptor Type 4	P50391	1068	CVTVRQKEKANVTNLL	Homo sapiens
1169	3405	Neuropeptide Y Receptor Type 4	P50391	1069	KNHSALEFLADKWC	Homo sapiens
1170	3405	Neuropeptide Y Receptor Type 4	P50391	1070	CYARIYRRLQRRGRVFKG	Homo sapiens

1171	3405	Type 4	Neuropeptide Y Receptor	P50391	1071	CQQSAPLESEHLPLST	Homo sapiens
1172	3405	Type 4	Neuropeptide Y Receptor	P50391	2275	SEHCQDSVDVMVFVTS	Homo sapiens
1173	3406	Type 4	Neuropeptide Y Receptor	Q15761	1072	MKKRNQKTTVNFLGN	Homo sapiens
1174	3406	Type 5	Neuropeptide Y Receptor	Q15761	1073	CGLSNKENRLEENEMI	Homo sapiens
1175	3406	Type 5	Neuropeptide Y Receptor	Q15761	1074	NLTLPSSKSGPQVKL	Homo sapiens
1176	3406	Type 5	Neuropeptide Y Receptor	Q15761	1075	SFIKKHRRRYSKKTAC	Homo sapiens
1177	3406	Type 5	Neuropeptide Y Receptor	Q15761	1076	PERPSQENHSRLPEN	Homo sapiens
1178	3406	Type 5	Neuropeptide Y Receptor	Q15761	1077	CFEIKPEENSVDVHEL RV	Homo sapiens
1179	3408	Neurotensin Receptor Type 1	Neurotensin Receptor Type	P30989	935	RVLAAPSSSELDVNTDIYS	Homo sapiens
1180	3408	Neurotensin Receptor Type 1	Neurotensin Receptor Type	P30989	936	CHPFKAKTLMRSRTKK	Homo sapiens
1181	3408	Neurotensin Receptor Type 1	Neurotensin Receptor Type	P30989	937	GEQNRSDGGHAGGLVC	Homo sapiens
1182	3408	Neurotensin Receptor Type 1	Neurotensin Receptor Type	P30989	938	RQAAEQGGQVCTVGGEHS	Homo sapiens
1183	3408	Neurotensin Receptor Type 1	Neurotensin Receptor Type	P30989	939	CPVWRRRRRRKRPAFSRKADS	Homo sapiens
1184	3452	Opiate Receptor-Like 1 (OPRL1)	Opiate Receptor-Like 1	P41146	940	CHPIRALDVRTSSKAQA	Homo sapiens
1185	3452	Opiate Receptor-Like 1 (OPRL1)	Opiate Receptor-Like 1	P41146	941	PVAIMGSAQVEDEIEC	Homo sapiens
1186	3452	Opiate Receptor-Like 1 (OPRL1)	Opiate Receptor-Like 1	P41146	942	GVQPSSETAVAILRFC	Homo sapiens
1187	3452	Opiate Receptor-Like 1 (OPRL1)	Opiate Receptor-Like 1	P41146	943	CASALRRDVQVSDRVRSIAK	Homo sapiens
1188	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	Ocular Albinism 1	NP_000264.1	2123	TPEPRPTQPMASPRLGTFC	Homo sapiens
1189	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	Ocular Albinism 1	NP_000264.1	2124	TAVASLLKGRQGIYE	Homo sapiens

1190	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2125	EMQTDINGGSLKPVRTAAK	Homo sapiens
1191	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2126	CSLGFQSPRKEIQWES	Homo sapiens
1192	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2127	SEGSDASTIEHTASESC	Homo sapiens
1193	3513	Ocular Albinism 1 (Nettleship-Falls) (OA1)	NP_000264.1	2128	NPASGKVSQVGGQTSD	Homo sapiens
1194	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1486	CKKLHPLKAGNDLDIRIK	Homo sapiens
1195	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1500	KIVKPLWTSFIQSVSYSKLL	Homo sapiens
1196	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1502	TAITKKIFKSHLKSSRNSTS	Homo sapiens
1197	3544	UDP-glucose Receptor (KIAA0001)	NP_055694.1	1503	VKKSSRNIFIVFVFFVC	Homo sapiens
1198	3582	Oxytocin Receptor	CAA46097.1	244	AEGNRTAGPPRRNEALARVE	Homo sapiens
1199	3582	Oxytocin Receptor	CAA46097.1	245	RLAVLATWLGCLVASAP	Homo sapiens
1200	3582	Oxytocin Receptor	CAA46097.1	246	PEGAAAGDGGRRVALAR	Homo sapiens
1201	3582	Oxytocin Receptor	CAA46097.1	247	YLGRRRLGETSASKKSNSS	Homo sapiens
1202	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	854	MQRIGDVLGSSDFRR	Homo sapiens
1203	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	855	ARGGRVTCHDTSAPEL	Homo sapiens
1204	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	856	KPAYGTSGLPRAKPK	Homo sapiens
1205	3589	Purinergic Receptor P2Y, G- protein coupled, 2 (P2RY2)	AAC04923.1	857	TGSPATPARRRLGLRRSD	Homo sapiens
1206	3595	Purinergic Receptor P2Y1	CAA07339.1	386	RYSGVVYPLKSLGRLKKN	Homo sapiens
1207	3595	Purinergic Receptor P2Y1	CAA07339.1	387	SGTGVRKNKTTTCYD	Homo sapiens
1208	3595	Purinergic Receptor P2Y1	CAA07339.1	388	RALYKDLDNSPLRRKS	Homo sapiens
1209	3595	Purinergic Receptor P2Y1	CAA07339.1	389	DTFRRLSRATRKASRSE	Homo sapiens
1210	3596	Purinergic Receptor P2Y5	P43657	850	FVQSTHSQGNINASEAC	Homo sapiens
1211	3596	Purinergic Receptor P2Y5	P43657	851	MVLKTLTKPVTLSRSKI	Homo sapiens
1212	3596	Purinergic Receptor P2Y5	P43657	852	TIGNSIKMKWNWSVRSD	Homo sapiens
1213	3596	Purinergic Receptor P2Y5	P43657	853	SEVHGAENFIQHNLQTLK	Homo sapiens
1214	3597	Purinergic Receptor P2Y6	Q15077	874	CTSRRLTRTAVVTLN	Homo sapiens
1215	3597	Purinergic Receptor P2Y6	Q15077	875	AQERRGKAARMAVVV	Homo sapiens

1216	3597	Purinergic Receptor P2Y6	Q15077	876	TKTAYLAVRSTPGVPC	Homo sapiens
1217	3597	Purinergic Receptor P2Y6	Q15077	877	KKFRRRPHELLQKLTA	Homo sapiens
1218	3597	Purinergic Receptor P2Y6	Q15077	2726	CHPLAPWHKRGGRRAAW	Homo sapiens
1219	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	870	CFRMKMRSETAIFITN	Homo sapiens
1220	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	871	RTLTKPATLSQIGTNKK	Homo sapiens
1221	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	872	ESFQKSFYINAHIRMES	Homo sapiens
1222	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	873	KTETPLTIKPSLPAIQEE	Homo sapiens
1223	3599	G Protein-Coupled Receptor 23 (GPR23)	Q99677	1895	SSLRPRLGNATANNTCIVD	Homo sapiens
1224	3638	Parathyroid Hormone Receptor 2 (PTHr2)	AAC50157.1	248	KAKVQCELNITAGLQEGE	Homo sapiens
1225	3638	Parathyroid Hormone Receptor 2 (PTHr2)	AAC50157.1	249	ESLUMQDDPQNSIEATSVDK	Homo sapiens
1226	3638	Parathyroid Hormone Receptor 2 (PTHr2)	AAC50157.1	250	NSEQDCLPHSFHEETKE	Homo sapiens
1227	3638	Parathyroid Hormone Receptor 2 (PTHr2)	AAC50157.1	251	EETKEDSGRQGGDDILMEKPS	Homo sapiens
1228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Q03431	761	CEKRLKEVLQRPASIMESDK	Homo sapiens
1229	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Q03431	762	ESEEDKEAPTGSRYRGRPC	Homo sapiens
1230	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Q03431	763	LYSGATLDEAERLITEELR	Homo sapiens
1231	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Q03431	765	KDDGFLNGSCSGLDEEASG	Homo sapiens
1232	3732	PACAP Receptor Type 1	P41586	944	CLEKIQRANELMGFNDSS	Homo sapiens
1233	3732	PACAP Receptor Type 1	P41586	945	CPELFRIFNPDQVWETET	Homo sapiens
1234	3732	PACAP Receptor Type 1	P41586	946	DSNSLDLSDMGVVSRC	Homo sapiens
1235	3732	PACAP Receptor Type 1	P41586	948	IKRKWRSWKVNRYFAVD	Homo sapiens
1236	3732	PACAP Receptor Type 1	P41586	2292	ESDFGDSNSLDLSDMGVVS	Homo sapiens
1237	3844	Apelin Receptor	AAA18954.1	62	RTTGDLNNTKVQC	Homo sapiens
1238	3844	Apelin Receptor	AAA18954.1	63	RSSREKRRSADIFAS	Homo sapiens
1239	3844	Apelin Receptor	AAA18954.1	64	QTIAGHFRKERIEGLRKRRR	Homo sapiens
1240	3844	Apelin Receptor	AAA18954.1	65	GPNMGKGGEQMHEKSIPYSQ	Homo sapiens

1241	3845	Chemokine-Like Receptor 1 (CMKLR1)	LR39	447	RMEDEDYNTSISYGDEYPD	Homo sapiens
1242	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	448	DSIVVLEDLSPLEARVTR	Homo sapiens
1243	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	449	LTIVCKLHRNRLAKTKKPFK	Homo sapiens
1244	3845	Chemokine-Like Receptor 1 (CMKLR1)	Q99788	450	RSFTKMSSMINERTSMNERE	Homo sapiens
1245	3846	Spingolipid Receptor Edg1	AAA52336.1	1010	TRSRRLTRFNKISKASRSE	Homo sapiens
1246	3846	Spingolipid Receptor Edg1	AAA52336.1	1011	CPSGDSAGKFKRPIIAG	Homo sapiens
1247	3846	Spingolipid Receptor Edg1	AAA52336.1	1012	CPSGDSAGKFKRPIIAGME	Homo sapiens
1248	3846	Spingolipid Receptor Edg1	AAA52336.1	1013	RSKSDNSSHPQKDEGD	Homo sapiens
1249	3847	Spingolipid Receptor Edg3	Q99500	1028	ERHLTIKIMRPYDANK	Homo sapiens
1250	3847	Spingolipid Receptor Edg3	Q99500	1029	LVKSSSRKVANHINSE	Homo sapiens
1251	3847	Spingolipid Receptor Edg3	Q99500	1030	SPKVKEIDPHIDPSSC	Homo sapiens
1252	3847	Spingolipid Receptor Edg3	Q99500	1031	CLVRGARGARASPIQPALD	Homo sapiens
1253	3847	Spingolipid Receptor Edg3	Q99500	1752	REHYQWVGKLAGRLKEASE	Homo sapiens
1254	3848	C-C Chemokine Receptor 9	P51686	958	RAHTWREKRLLYSKMVC	Homo sapiens
1255	3848	C-C Chemokine Receptor 9	P51686	959	KEESGIAICTMVPSDEST	Homo sapiens
1256	3848	C-C Chemokine Receptor 9	P51686	960	QAKKSSKHKALKVTIT	Homo sapiens
1257	3848	C-C Chemokine Receptor 9	P51686	961	GERFRDLVTKLNLC	Homo sapiens
1258	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	74	ENYSYDLDYYSLESDLEEK	Homo sapiens
1259	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	75	RDTVEFNHITLCYNNFQKHD	Homo sapiens
1260	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	76	SKKFQARFRSSVAEILK	Homo sapiens
1261	3849	G Protein-Coupled Receptor GPR1	AAA64592.1	77	GTVSEQLRNSETKNLC	Homo sapiens
1262	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1087	HPLRRLRISRLSAYAV	Homo sapiens
1263	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1088	CEEFWGSQERQRQLYA	Homo sapiens
1264	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1089	SVRVSVKLRNRVWPGC	Homo sapiens
1265	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1090	CVTGSQADWDRARRRR	Homo sapiens
1266	3850	G Protein-Coupled Receptor 10 (GPR10)	O75194	1091	DSFREELRKLVAWPRKIA	Homo sapiens

1267	3851	Receptor 10 (GPR10) G Protein-Coupled Receptor GPR12	AAA91630.1	78	GCISSLAQRRARSPSD	Homo sapiens
1268	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	79	ENISAAVSSRVPAVEPEPE	Homo sapiens
1269	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	307	STCSVWRPLTKNNAA	Homo sapiens
1270	3851	G Protein-Coupled Receptor GPR12	AAA91630.1	308	QSEATKLVITGLIVAS	Homo sapiens
1271	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	84	KQKENECLGDYPEVLQEQ	Homo sapiens
1272	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	85	SMNNRTVQHGVITSL	Homo sapiens
1273	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	86	ETLKLYDFFPSCDMRKDLR	Homo sapiens
1274	3852	CX3C Chemokine Fractalkine Receptor 1	AAA91783.1	87	GRSVHVDFFSSESQRSRHGS	Homo sapiens
1275	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1511	CLKNYDFGSSTETSDSHLIK	Homo sapiens
1276	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1512	KALSTFIHAEDFARRRKRS	Homo sapiens
1277	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1612	ATSPNSDIRETHSHVP	Homo sapiens
1278	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1613	LMGALHFKPGSRRUD	Homo sapiens
1279	3853	G Protein-Coupled Receptor GPR15	NP_005281.1	1615	GLPTLLSRELTLDKPYC	Homo sapiens
1280	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	93	DRYMAIVQPKYAKELKNIC	Homo sapiens
1281	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	94	KDPDKDSTPATCLKISD	Homo sapiens
1282	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	95	GRTSKLKPVKKEKSIR	Homo sapiens
1283	3854	G Protein-Coupled Receptor GPR18	AAB65819.1	96	RNYLSRLRRKSFRSGSLR	Homo sapiens
1284	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	97	KVSREKAKKMIAASWIFD	Homo sapiens
1285	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	98	DGRTVRRITMINIVPRTKVK	Homo sapiens

1286	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	99	RRGMKETFCMSSMKC	Homo sapiens
1287	3855	G Protein-Coupled Receptor GPR19	AAB00316.1	100	KTIITKDSIYDSFDREAKEKK	Homo sapiens
1288	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1152	ALLFSQDGGQREGQRRC	Homo sapiens
1289	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1153	SGDEEDAYSAPPELPC	Homo sapiens
1290	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1154	ALLDTADLLAARERC	Homo sapiens
1291	3856	G Protein-Coupled Receptor GPR2/CCR10	P46092	1155	RLLRGSSPSGPQPRRG	Homo sapiens
1292	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	101	KSGRHHLSAGPHALTQ	Homo sapiens
1293	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	102	RTNASGLEVPLHFLFARLDE	Homo sapiens
1294	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	103	SRPGLLHQGRQRRVRAMQ	Homo sapiens
1295	3857	G Protein-Coupled Receptor GPR20	AAC51302.1	104	GQHGEREPSSGDVVMHRSS	Homo sapiens
1296	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	105	SERQARFSSQSGETGEVQAC	Homo sapiens
1297	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	106	DPYTVRSKGPLNGC	Homo sapiens
1298	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	107	NSTLDGNQSSHPFCLL	Homo sapiens
1299	3858	G Protein-Coupled Receptor GPR21	AAC51303.1	108	CASQTANDPYTVRSK	Homo sapiens
1300	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	109	ENMQSESNTVRDDIDD	Homo sapiens
1301	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	111	RRAVKRHRERRERQKRVFRM	Homo sapiens
1302	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	112	TRQKFQKVLKSKMKKR	Homo sapiens
1303	3859	G Protein-Coupled Receptor GPR22	AAC51304.1	113	DPKRNKKTFEEDSEIREKR	Homo sapiens
1304	3860	G Protein-Coupled Receptor SLC/MCH1	AAH01736.1	1532	CAPGQGGRRWRLPQPAWVEG	Homo sapiens
1305	3860	G Protein-Coupled	AAH01736.1	1533	EASLLPTGPNASNTSDGPDN	Homo sapiens

1306	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1539	KGVGRAVGLGGSGCQATE	Homo sapiens
1307	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1565	RMTSSVAPASQRSIRLRTKR	Homo sapiens
1308	3860	Receptor SLC/MCH1 G Protein-Coupled	AAH01736.1	1567	RAVSNAGTAEERTESKG	Homo sapiens
1309	3861	Receptor SLC/MCH1 G Protein-Coupled	O00155	376	RGLQLPGGQDSQCCEEP	Homo sapiens
1310	3861	Receptor GPR25 G Protein-Coupled	O00155	377	CRISRLRRPPHVGRARRNS	Homo sapiens
1311	3861	Receptor GPR25 G Protein-Coupled	O00155	378	RTGRLARRISSASSLRDD	Homo sapiens
1312	3861	Receptor GPR25 G Protein-Coupled	O00155	483	DYSGLDGLEELELCPAGD	Homo sapiens
1313	3862	Receptor GPR25 G Protein-Coupled	AAB60402.1	118	TVYCLLGDAHSPLYT	Homo sapiens
1314	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	119	EGPTGPAAPLPSPKAWD	Homo sapiens
1315	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	120	HFAAVFCIGSAEMSL	Homo sapiens
1316	3862	Receptor GPR3 G Protein-Coupled	AAB60402.1	121	GLTCGVVYPLSKNH	Homo sapiens
1317	3863	Receptor GPR3 G Protein-Coupled	O00270	1157	REPEKQPKLQRAQALVTLV	Homo sapiens
1318	3863	Receptor GPR31 G Protein-Coupled	O00270	1158	CHSFYSRADGFSFIWQEA	Homo sapiens
1319	3863	Receptor GPR31 G Protein-Coupled	O00270	1159	QNLGSCRALCAVAHTSDVTG	Homo sapiens
1320	3863	Receptor GPR31 G Protein-Coupled	O00270	1160	SPTRSSYRRVFHILRGKGQ	Homo sapiens
1321	3864	Receptor GPR31 G Protein-Coupled	AAA98457.1	143	DELFRDRYNHTFCFEKFPME	Homo sapiens
1322	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	144	LRAVRGSVSTERQEKAKIKR	Homo sapiens
1323	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	145	RSDVAKALHNLLRFLASDK	Homo sapiens
1324	3864	Receptor GPR4 G Protein-Coupled	AAA98457.1	146	NASLTLETPLTSKRNSTAK	Homo sapiens

1325	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	166	FQYLVPSVTSLLTVG	Homo sapiens
1326	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	167	CLAERAACSVVRPLARSH	Homo sapiens
1327	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	168	HLVYRICQVVRHAH	Homo sapiens
1328	3866	G Protein-Coupled Receptor GPR6	AAA91631.1	169	EIQRALWLLCGCFQSK	Homo sapiens
1329	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	171	ATAESRRVAGRTYSAAR	Homo sapiens
1330	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	172	RLDDEQGRRCQCVLVFPQPE	Homo sapiens
1331	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	173	RIHAMIRLDSHAKALERAKKR	Homo sapiens
1332	3867	G Protein-Coupled Receptor GPR7	AAC50197.1	174	DASFRRLRQLTIC	Homo sapiens
1333	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	175	NVSQDNGTGHNATFSEP	Homo sapiens
1334	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	176	RSRHMPWRTYRGAKVAS	Homo sapiens
1335	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	177	VLRSGAKALGKARRK	Homo sapiens
1336	3868	G Protein-Coupled Receptor GPR8	AAC50198.1	178	LDNFRKNFRSLRC	Homo sapiens
1337	3869	G Protein-Coupled Receptor HM74	BAA01721.1	179	QDHFLEIDKKNCVFRDD	Homo sapiens
1338	3869	G Protein-Coupled Receptor HM74	BAA01721.1	180	ARIWSLRQRQMDRHAQIKR	Homo sapiens
1339	3869	G Protein-Coupled Receptor HM74	BAA01721.1	181	CLQRKMTGEPDNNRSTVE	Homo sapiens
1340	3869	G Protein-Coupled Receptor HM74	BAA01721.1	182	DPNKTRGAPEALMANSGE	Homo sapiens
1341	3869	G Protein-Coupled Receptor HM74	BAA01721.1	183	SNNHKKGHCHQEPASLEKQ	Homo sapiens
1342	3869	G Protein-Coupled Receptor HM74	BAA01721.1	1453	RQRQMDRHAQIKRAITFIMV	Homo sapiens
1343	3869	G Protein-Coupled Receptor HM74	BAA01721.1	1454	SPSYLGPTSNNHKKKG	Homo sapiens
1344	3870	G Protein-Coupled	Q15743	1192	AVRRSHGTQKSRKDQI	Homo sapiens

1345	3870	Receptor OGR1	Q15743	1193	LMHEEVIEDENQHRC	Homo sapiens
1346	3870	G Protein-Coupled Receptor OGR1	Q15743	1194	CFVSETTHRDLARLG	Homo sapiens
1347	3870	G Protein-Coupled Receptor OGR1	Q15743	1195	CSRTGRAREAYPLGAPEASG	Homo sapiens
1348	3921	Prostaglandin D2 Receptor	P43119	1188	CRMVYRQQKRRHQSLGPRPRT	Homo sapiens
1349	3921	Prostaglandin D2 Receptor	P43119	1189	CFTQAVAPDSSEMGG	Homo sapiens
1350	3921	Prostaglandin D2 Receptor	P43119	1190	ASGRRDPRAPSPVKGEGSC	Homo sapiens
1351	3921	Prostaglandin D2 Receptor	P43119	1191	SAWGEGQVEPLPPTQQ	Homo sapiens
1352	3923	Prostaglandin D2 Receptor	Q13258	458	KSPFYRCQNTTSVEKGN SAV	Homo sapiens
1353	3923	Prostaglandin D2 Receptor	Q13258	459	RNLVAMHRRRLQRHPRSC	Homo sapiens
1354	3923	Prostaglandin D2 Receptor	Q13258	503	CAEPRADGREASPPLEEL	Homo sapiens
1355	3923	Prostaglandin D2 Receptor	Q13258	504	KDVKEKNRTSEEAEDLRALR	Homo sapiens
1356	3924	Prostaglandin E Receptor EP1	P34995	962	AQAAGRLRRRRSATTF	Homo sapiens
1357	3924	Prostaglandin E Receptor EP1	P34995	963	CVGVTRPLLHAARVSVARAR	Homo sapiens
1358	3924	Prostaglandin E Receptor EP1	P34995	964	CNTLSGLALHRARWRR	Homo sapiens
1359	3924	Prostaglandin E Receptor EP1	P34995	965	ASGPDSSRRRWGAHGPR	Homo sapiens
1360	3924	Prostaglandin E Receptor EP1	P34995	966	SGSARRARAHDMVMVGQ	Homo sapiens
1361	3925	Prostaglandin E Receptor EP2	AAD44177.1	967	IALALLARRWRGDIVGC	Homo sapiens
1362	3925	Prostaglandin E Receptor EP2	AAD44177.1	968	CETRQWLPPGESPAISSV	Homo sapiens
1363	3925	Prostaglandin E Receptor EP2	AAD44177.1	969	GPSLGSGRGGPGARRRGE	Homo sapiens
1364	3925	Prostaglandin E Receptor EP2	AAD44177.1	971	NETSSRKEKWDLQALR	Homo sapiens
1365	3926	Prostaglandin E2 Receptor EP3	CAB52459.1	972	ERSAEARGNLTRPPGSGEDC	Homo sapiens
1366	3926	Prostaglandin E2 Receptor EP3	CAB52459.1	973	SRSYRRRESKRKKSFLLC	Homo sapiens
1367	3926	Prostaglandin E2 Receptor	CAB52459.1	974	CRAKATASQSSAQWGR	Homo sapiens

1368	3926	EP3	Prostaglandin E2 Receptor	CAB52459.1	975	KFCQVANAVSSCSNDGQ	Homo sapiens
1369	3927	EP3	Prostaglandin E Receptor	P35408	382	RLSDFRRRRSFRRIAGAE	Homo sapiens
1370	3927	EP4	Prostaglandin E Receptor	P35408	383	EREVSKNPDLQAIRIAS	Homo sapiens
1371	3927	EP4	Prostaglandin E Receptor	P35408	384	DSQRTSSAMSGHSRFSIRE	Homo sapiens
1372	3927	EP4	Prostaglandin E Receptor	P35408	385	RTLRISETSDSSQGQDSE	Homo sapiens
1373	3928	Receptor	Prostaglandin F2-alpha	P43088	1046	ILMKAYQRRFRQKSKAS	Homo sapiens
1374	3928	Receptor	Prostaglandin F2-alpha	P43088	1047	ASDKEWIRFDQSNVLC	Homo sapiens
1375	3928	Receptor	Prostaglandin F2-alpha	P43088	1048	TKPIFHSTKITSKHVK	Homo sapiens
1376	3928	Receptor	Prostaglandin F2-alpha	P43088	1049	CFYNTEDIKDWDREY	Homo sapiens
1377	3928	Receptor	Prostaglandin F2-alpha	P43088	1050	RVKFKSQQHRQGRSHLE	Homo sapiens
1378	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	252	QGTNRSSKGRSLUGKVDGTS	Homo sapiens
1379	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	253	QRYWVIVNPMGHSRKKAN	Homo sapiens
1380	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	255	SHDFRDHAKNALLCRSVR	Homo sapiens
1381	4051	Proteinase-Activated Receptor 2	Proteinase-Activated Receptor 2	AAB47871.1	256	VSLTSKKHSRKSSYS	Homo sapiens
1382	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	257	ENDTNINLAKPTLPIKTR	Homo sapiens
1383	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	258	CPEESASHLVKKNATMG	Homo sapiens
1384	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	260	QPDITTCCHDVHNTCESSP	Homo sapiens
1385	4052	Proteinase-Activated Receptor 3	Proteinase-Activated Receptor 3	AAC51218.1	261	MSKTRNHSTAYLTK	Homo sapiens
1386	4090	G Protein-Coupled Receptor GPR17	G Protein-Coupled Receptor GPR17	CAB08108.1	88	RDHKSGETPANVFLMH	Homo sapiens

1387	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	90	PSLRQGLRVEKRLTKAVR	Homo sapiens
1388	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	91	RSHGASCATQIRILALANR	Homo sapiens
1389	4090	G Protein-Coupled Receptor GPR17	CAB08108.1	92	FEGKTNESSLSAKSE	Homo sapiens
1390	4254	Rhodopsin	P08100	1051	RNCMLTITCCGKNPLGD	Homo sapiens
1391	4254	Rhodopsin	P08100	1052	CGIDYYTLKPEVNNESFVI	Homo sapiens
1392	4254	Rhodopsin	P08100	1053	CWVPYASVAFYIFTHQGSN	Homo sapiens
1393	4254	Rhodopsin	P08100	1055	VLGGFTSLYLSLHGY	Homo sapiens
1394	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1042	ATSSLLRRWPYGSDDGC	Homo sapiens
1395	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1043	CTLDYSKGDNRNFTSFL	Homo sapiens
1396	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1044	MEQKLGKSGHLQVNTT	Homo sapiens
1397	4284	Retinal G Protein-Coupled Receptor RPE	P47804	1045	MVCRGIWQCLSPQKRE	Homo sapiens
1398	4321	Secretin Receptor	P47872	950	CLQELSRQIGDLGTEQ	Homo sapiens
1399	4321	Secretin Receptor	P47872	951	CPRFLRMLTSRNGSLFRN	Homo sapiens
1400	4321	Secretin Receptor	P47872	952	CGVNVNDSSNEKRHSY	Homo sapiens
1401	4321	Secretin Receptor	P47872	954	KDAVLFSSDDVTYCDAAH	Homo sapiens
1402	4321	Secretin Receptor	P47872	956	MRKLRTQETRGNEVSH	Homo sapiens
1403	4480	Somatostatin Receptor Type 1	P30872	994	EEPGRNASQNGTLSEG	Homo sapiens
1404	4480	Somatostatin Receptor Type 1	P30872	996	CLSWMDNAAEEPVDY	Homo sapiens
1405	4480	Somatostatin Receptor Type 1	P30872	997	EDFQPENLESGGVFRNGTC	Homo sapiens
1406	4480	Somatostatin Receptor Type 1	P30872	2616	LSVDAVNMFTSIYC	Homo sapiens
1407	4480	Somatostatin Receptor Type 1	P30872	2618	RAYSVEDFQPENLES	Homo sapiens
1408	4481	Somatostatin Receptor Type 2	P30874	998	RSNQWGRSSCTINWPGE	Homo sapiens
1409	4481	Somatostatin Receptor Type 2	P30874	999	KVKSSGIRVGS SKRKKSE	Homo sapiens
1410	4481	Somatostatin Receptor Type	P30874	1000	CLVKVSGTDDGERSDS	Homo sapiens

1411	4481	2	Somatostatin Receptor Type P30874	1001	KQDKSRNLNETTETQRT	Homo sapiens
1412	4481	2	Somatostatin Receptor Type P30874	2276	DMADEPLNGSHTWLSIP	Homo sapiens
1413	4482	2	Somatostatin Receptor Type P32745	1002	KVRSAGRRVWAPSCQR	Homo sapiens
1414	4482	3	Somatostatin Receptor Type P32745	2622	REGGKGKEMNGRVSQL	Homo sapiens
1415	4482	3	Somatostatin Receptor Type P32745	2624	TTSEPENASSAWPPD	Homo sapiens
1416	4482	3	Somatostatin Receptor Type P32745	2626	QPGTSGQERPPSRVA	Homo sapiens
1417	4483	3	Somatostatin Receptor Type P31391	1007	IFADTRPARGGQAVAC	Homo sapiens
1418	4483	4	Somatostatin Receptor Type P31391	1008	CLLEGAGGAEELPDY	Homo sapiens
1419	4483	4	Somatostatin Receptor Type P31391	2627	KMRAVALRAGWQQR	Homo sapiens
1420	4483	4	Somatostatin Receptor Type P31391	2631	CRAVLSVDGLNMFTSV	Homo sapiens
1421	4483	4	Somatostatin Receptor Type P31391	2633	CLVGLVGNALVIFVL	Homo sapiens
1422	4484	4	Somatostatin Receptor Type NP_001044.1	2637	SLPLLVFADVQEGGTC	Homo sapiens
1423	4484	5	Somatostatin Receptor Type NP_001044.1	2638	CLRKGSGAKDADATEP	Homo sapiens
1424	4484	5	Somatostatin Receptor Type NP_001044.1	2639	RIRQQQEATPPAHRAAA	Homo sapiens
1425	4484	5	Somatostatin Receptor Type NP_001044.1	2643	RVAKLASAAAWVLSLC	Homo sapiens
1426	4552	5	Tachykinin Receptor 1 AAA36641.1	1339	CMIEWPEHPNKIYEKV	Homo sapiens
1427	4552		Tachykinin Receptor 1 AAA36641.1	1340	CPFISAGDYEGLMKSTRYL	Homo sapiens
1428	4552		Tachykinin Receptor 1 AAA36641.1	1341	KVSRLETTISTVVGAAHEE	Homo sapiens
1429	4552		Tachykinin Receptor 1 AAA36641.1	1342	EPEDGPKATPSSDLTSNC	Homo sapiens
1430	4687		Thrombin Receptor P25116	1202	EDEEKNESGLTEYRLV	Homo sapiens
1431	4687		Thrombin Receptor P25116	2582	AVANPSKKSRAFLSAAVFC	Homo sapiens
1432	4687		Thrombin Receptor P25116	2583	SINKSSPLQKQLPAFISE	Homo sapiens

1433	4687	Thrombin Receptor	P25116	2621	DPRSELLRNPNDKYEPFWE	Homo sapiens
1434	4734	Thyrotropin Releasing Hormone Receptor	P34981	1196	PSDPKENSKTWKNDST	Homo sapiens
1435	4734	Thyrotropin Releasing Hormone Receptor	P34981	1197	CFNSTVSSRKQVTKMLA	Homo sapiens
1436	4734	Thyrotropin Releasing Hormone Receptor	P34981	1198	RAAFRLKLCNCKQKPTE	Homo sapiens
1437	4734	Thyrotropin Releasing Hormone Receptor	P34981	1199	KPANYSVALNYSVIKE	Homo sapiens
1438	4734	Thyrotropin Releasing Hormone Receptor	P34981	1200	KESDHFSTELDDITVID	Homo sapiens
1439	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1771	EIQKNKPRNDIDFKII	Homo sapiens
1440	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1772	SYRPSDNVSSSTKKPAPC	Homo sapiens
1441	4944	Angiotensin II Type 1 Receptor	NP_000676.1	1773	LNSSTEDGIKRIQDDC	Homo sapiens
1442	4946	Angiotensin II Type 2 Receptor	P50052	1321	CSQKPSDKHLDAPIL	Homo sapiens
1443	4946	Angiotensin II Type 2 Receptor	P50052	1322	DRYQSVIVPFLSQRRN	Homo sapiens
1444	4946	Angiotensin II Type 2 Receptor	P50052	1323	RKHLTKTNSYGKNRITRD	Homo sapiens
1445	4946	Angiotensin II Type 2 Receptor	P50052	1324	RVPTITWLQGKRSMSC	Homo sapiens
1446	5072	Pyrimidinergic Receptor P2Y4	P51582	1142	CHDTTRPEEFDHYVHFSSA	Homo sapiens
1447	5072	Pyrimidinergic Receptor P2Y4	P51582	1145	YLLTGDKYRRQLRQLC	Homo sapiens
1448	5072	Pyrimidinergic Receptor P2Y4	P51582	2696	HPLRALRWGRPRLAG	Homo sapiens
1449	5072	Pyrimidinergic Receptor P2Y4	P51582	2697	HIITRIYVYLARLLEADC	Homo sapiens
1450	5117	Vasopressin V1A Receptor	AAA62271.1	262	REAELGEGNGPPRDVRNEE	Homo sapiens
1451	5117	Vasopressin V1A Receptor	AAA62271.1	263	NVRGKTASRQSKGAEQ	Homo sapiens
1452	5117	Vasopressin V1A Receptor	AAA62271.1	264	QNMKEFKNKEDTDSMSRRQ	Homo sapiens
1453	5117	Vasopressin V1A Receptor	AAA62271.1	265	RQIFYSNRPSNTSGMWKD	Homo sapiens
1454	5118	Vasopressin V1B Receptor	AAA65687.1	266	NATPWLGRLDEELAKVE	Homo sapiens
1455	5118	Vasopressin V1B Receptor	AAA65687.1	267	TRGLPSRVSSINTISRAKIR	Homo sapiens

1456	5118	Vasopressin V1B Receptor	AAA65687.1	268	QPRMRRRLSDGSLSRH	Homo sapiens
1457	5118	Vasopressin V1B Receptor	AAA65687.1	269	ESPRDLELADGEGTAET	Homo sapiens
1458	5119	Vasopressin V2 Receptor	CAA77746.1	270	SNSSQERPLDTRDPLARAE	Homo sapiens
1459	5119	Vasopressin V2 Receptor	CAA77746.1	271	RHGSGAHWNRPVLVAWAFS	Homo sapiens
1460	5119	Vasopressin V2 Receptor	CAA77746.1	272	CQVLIFREIHASLVPGPSE	Homo sapiens
1461	5119	Vasopressin V2 Receptor	CAA77746.1	273	RGRTPPSLGPQDESC	Homo sapiens
1462	5133	Peropsin	O14718	1147	KNEDGSVFSQTEHNIV	Homo sapiens
1463	5133	Peropsin	O14718	1148	IKYKELRPTNAIIN	Homo sapiens
1464	5133	Peropsin	O14718	1149	RKNDRSFVSYMTVIA	Homo sapiens
1465	5133	Peropsin	O14718	1150	CTESLNIRDWSDQIDVTK	Homo sapiens
1466	5133	Peropsin	O14718	1151	VANKKFRRLAMLFKC	Homo sapiens
1467	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	987	CGPAGRTSSRSQSLRSTDAR	Homo sapiens
1468	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	988	EENRDKWEEAQLAGPN	Homo sapiens
1469	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	989	CRWVDRQEEGNGDSGG	Homo sapiens
1470	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	990	KRDKAPKSSFVGDGDI	Homo sapiens
1471	5519	Brain-Specific Angiogenesis Inhibitor 1	O14514	991	RKLQHAAEKDKEVLGP	Homo sapiens
1472	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	981	CLRSPPEEAVAQAESEVGR	Homo sapiens
1473	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	982	GSSNDLFTIEMRYGEE	Homo sapiens
1474	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	983	MARDGISDKSKQKQAGSERC	Homo sapiens
1475	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	984	EDAPRARPEGTPRRAAK	Homo sapiens
1476	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	985	RSRTMPRTVPGSTMKMGSL	Homo sapiens
1477	5520	Brain-Specific Angiogenesis Inhibitor 2	O60241	986	KREKRWSVSSGGAAERSVC	Homo sapiens
1478	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	976	RRVFPTNFPGLQKKGE	Homo sapiens
1479	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	977	CNLTREAKRPPKEEFG	Homo sapiens
1480	5521	Brain-Specific Angiogenesis Inhibitor 3	O60242	978	KLKHRAGQMSEPHSGLTKC	Homo sapiens

1481	5521	Inhibitor 3	Brain-Specific Angiogenesis Inhibitor 3	O60242	979	CTDDNLRGADMIVHPQER	Homo sapiens
1482	5521	Inhibitor 3	Brain-Specific Angiogenesis Inhibitor 3	O60242	980	SRSETGSTISMSSILERR	Homo sapiens
1483	6031	SIV/HIV Receptor BONZO	SIV/HIV Receptor BONZO	O00574	1101	NDSSQEEHQDFLQFSK	Homo sapiens
1484	6031	SIV/HIV Receptor BONZO	SIV/HIV Receptor BONZO	O00574	1102	KATKAYNQQAQKRMWGW	Homo sapiens
1485	6031	SIV/HIV Receptor BONZO	SIV/HIV Receptor BONZO	O00574	1103	KTLLHAGGFQKHRSK	Homo sapiens
1486	6031	SIV/HIV Receptor BONZO	SIV/HIV Receptor BONZO	O00574	1104	SLKFRKNFWKLVKDIGC	Homo sapiens
1487	6031	SIV/HIV Receptor BONZO	SIV/HIV Receptor BONZO	O00574	1105	KSEEDNSKTFASHNV	Homo sapiens
1488	6204	Lysophosphatidic Acid Receptor Edg4	Lysophosphatidic Acid Receptor Edg4	AAC27728.1	66	ERHRSMVMAVQLHSRLPRGR	Homo sapiens
1489	6204	Lysophosphatidic Acid Receptor Edg4	Lysophosphatidic Acid Receptor Edg4	AAC27728.1	67	RRRVQRMAEHVSCHPVRE	Homo sapiens
1490	6204	Lysophosphatidic Acid Receptor Edg4	Lysophosphatidic Acid Receptor Edg4	AAC27728.1	68	NAAVVSCRDAEMRRITERR	Homo sapiens
1491	6204	Lysophosphatidic Acid Receptor Edg4	Lysophosphatidic Acid Receptor Edg4	AAC27728.1	69	RQSTRESVHYTSSAQGGAST	Homo sapiens
1492	6213	C-C Chemokine Receptor 5	C-C Chemokine Receptor 5	AAC50598.1	38	YSQYQFWKNFQTLK	Homo sapiens
1493	6213	C-C Chemokine Receptor 5	C-C Chemokine Receptor 5	AAC50598.1	39	QQEAPERASSVYTRSTGEQE	Homo sapiens
1494	6213	C-C Chemokine Receptor 5	C-C Chemokine Receptor 5	AAC50598.1	40	RSQKEGLHYTCSSHFPYSQ	Homo sapiens
1495	6213	C-C Chemokine Receptor 5	C-C Chemokine Receptor 5	AAC50598.1	309	MDYQVSSPIVDINYYTSEPC	Homo sapiens
1496	6363	Chemokine (C-C motif) Receptor-like 2 (CCR2)	Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421	1092	EDEYDVLIEGELEDEAEQC	Homo sapiens
1497	6363	Chemokine (C-C motif) Receptor-like 2 (CCR2)	Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421	1093	KGNFFSARRRVPCGIITSVL	Homo sapiens
1498	6363	Chemokine (C-C motif) Receptor-like 2 (CCR2)	Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421	1094	MRKTLRFREQRYSLFLVFA	Homo sapiens
1499	6363	Chemokine (C-C motif) Receptor-like 2 (CCR2)	Chemokine (C-C motif) Receptor-like 2 (CCR2)	O00421	1096	RSNTPQLQPRGQSAQGTGRE	Homo sapiens
1500	6446	Pael Receptor (GPR37)	Pael Receptor (GPR37)	AAC51281.1	127	GPGNSARDVLRARAPREEQG	Homo sapiens
1501	6446	Pael Receptor (GPR37)	Pael Receptor (GPR37)	AAC51281.1	129	DPGGPRRGNSINRRVRLKNP	Homo sapiens
1502	6446	Pael Receptor (GPR37)	Pael Receptor (GPR37)	AAC51281.1	130	LRQLSKEDLGFSGRAPERC	Homo sapiens
1503	6446	Pael Receptor (GPR37)	Pael Receptor (GPR37)	AAC51281.1	131	PRGAVISGRSQEQSVKTPVG	Homo sapiens
1504	6446	Pael Receptor (GPR37)	Pael Receptor (GPR37)	AAC51281.1	1781	CIQKSTVTSDDDNDNEYTE	Homo sapiens
1505	6446	Pael Receptor (GPR37)	Pael Receptor (GPR37)	NP_005293.1	1806	CIQKSTVTSDDDNDNEYTE	Homo sapiens
1506	6536	Putative Neurotransmitter Receptor (PNR)	Putative Neurotransmitter Receptor (PNR)	O14804	319	TDWVEIRLSQWLEEMPC	Homo sapiens

1507	6536	Putative Neurotransmitter Receptor (PNR)	O14804	320	KSLAGAAKHERKAAKT	Homo sapiens
1508	6536	Putative Neurotransmitter Receptor (PNR)	O14804	321	RKALKLTLQKVFSPQTR	Homo sapiens
1509	6536	Putative Neurotransmitter Receptor (PNR)	O14804	485	HPAAFCYQVNGSCPR	Homo sapiens
1510	6777	G Protein-Coupled Receptor TM7SF1	O60478	788	KAKSKYSPELLKYRLP	Homo sapiens
1511	6777	G Protein-Coupled Receptor TM7SF1	O60478	790	KTGNWERKIVSVRVA	Homo sapiens
1512	6777	G Protein-Coupled Receptor TM7SF1	O60478	791	KSVHSFDYDWWNVSDQAD	Homo sapiens
1513	6777	G Protein-Coupled Receptor TM7SF1	O60478	792	RVRNPTKDLINPGMVP	Homo sapiens
1514	6777	G Protein-Coupled Receptor TM7SF1	O60478	793	RYDSDDDLAWNIAPQGLQ	Homo sapiens
1515	6853	Purinergic Receptor P2Y11	O43190	865	PTLSFSLKRPQGGAGNC	Homo sapiens
1516	6853	Purinergic Receptor P2Y11	O43190	866	GALGRAVLSPGMTVAE	Homo sapiens
1517	6853	Purinergic Receptor P2Y11	O43190	867	MRVLNVDAARRRWSTRC	Homo sapiens
1518	6853	Purinergic Receptor P2Y11	O43190	868	CPGYRDSWNPEDAKTGQA	Homo sapiens
1519	6853	Purinergic Receptor P2Y11	O43190	2299	CPANFLAAADDKLSGFQGD	Homo sapiens
1520	6853	Purinergic Receptor P2Y11	O43190	2300	ASNGLALYRFSIRKQR	Homo sapiens
1521	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	137	CNRSSIRHHEQPETSN	Homo sapiens
1522	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	139	PNQIRIRIMAAAKPKHD	Homo sapiens
1523	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	140	EKRLRVHAHSTDSAR	Homo sapiens
1524	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	141	VQRPLLFASRRQSSARRTEK	Homo sapiens
1525	6921	G Protein-Coupled Receptor GPR39	AAC26082.1	142	QSEAEPQSKQSLSLESLEP	Homo sapiens
1526	7221	Galanin Receptor GalR2	AAC39634.1	197	NLTVCHPAWSAPRRRAMD	Homo sapiens
1527	7221	Galanin Receptor GalR2	AAC39634.1	198	RAVDPVAAAGSGARRAKRK	Homo sapiens
1528	7221	Galanin Receptor GalR2	AAC39634.1	199	GRAPGRASGRVCAAAARG	Homo sapiens
1529	7221	Galanin Receptor GalR2	AAC39634.1	200	ERESDLLHMSEAAAGALRPC	Homo sapiens
1530	7246	Orexin Receptor 1	AAC39601.1	235	DQLGDLQGLSGEPQP	Homo sapiens
1531	7246	Orexin Receptor 1	AAC39601.1	236	EPSATPGAAQMGVPPGSR	Homo sapiens

1532	7246	Orexin Receptor 1	AAC39601.1	237	KRPDQLGLDLEQGLSGEPQ	Homo sapiens
1533	7246	Orexin Receptor 1	AAC39601.1	239	KAPSPRSSASHKSLSLQSRC	Homo sapiens
1534	7247	Orexin Receptor 2	AAC39602.1	240	SELNETQEPFLNPTDYDDEE	Homo sapiens
1535	7247	Orexin Receptor 2	AAC39602.1	241	KWKPLQPVSQPRGPGQ	Homo sapiens
1536	7247	Orexin Receptor 2	AAC39602.1	242	TKRMSAVAAEIKQIRA	Homo sapiens
1537	7247	Orexin Receptor 2	AAC39602.1	243	RQEDRLTRGRISTESRKS	Homo sapiens
1538	8436	Platelet-Activating Factor Receptor	P25105	1097	AVTRPIKTAQANTKR	Homo sapiens
1539	8436	Platelet-Activating Factor Receptor	P25105	1098	DSNTVPSDAGSGNVTRC	Homo sapiens
1540	8436	Platelet-Activating Factor Receptor	P25105	1099	QQRNAEVKRRALWMVC	Homo sapiens
1541	8436	Platelet-Activating Factor Receptor	P25105	1100	KKFRKHLTEKFYSMRSSRKC	Homo sapiens
1542	8509	G Protein-Coupled Receptor Ls8509	Q14439	398	DRYYSVLYPLERKISDAKSR	Homo sapiens
1543	8509	G Protein-Coupled Receptor Ls8509	Q14439	400	DEESEAKYIGSADFQAKE	Homo sapiens
1544	8509	G Protein-Coupled Receptor Ls8509	Q14439	401	ETRNSKKRLPLGNTPEE	Homo sapiens
1545	8509	G Protein-Coupled Receptor Ls8509	Q14439	402	ELUQTKVPKVGRVERKMMSR	Homo sapiens
1546	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1078	KKQRKAQNFTSILIAN	Homo sapiens
1547	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1079	FRNLSLPTDLYTHQVAC	Homo sapiens
1548	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1080	CVENWPSKKDRLLFTT	Homo sapiens
1549	8896	Neuropeptide Y Receptor Type 6 Pseudogene	Q99463	1081	CLRRRNAKVDDKKENEGR	Homo sapiens
1550	9421	Neuropeptide Y Receptor Type 1	P25929	1064	DEPFQNVTLDAYKDKVVC	Homo sapiens
1551	9421	Neuropeptide Y Receptor Type 1	P25929	1065	CYFKYIRLKRNNMMMDK	Homo sapiens
1552	9421	Neuropeptide Y Receptor Type 1	P25929	1066	CDFRSRDDDYETIAMS	Homo sapiens
1553	9421	Neuropeptide Y Receptor Type 1	P25929	1498	ENDDCHLPLAMIFTALA	Homo sapiens
1554	9421	Neuropeptide Y Receptor Type 1	P25929	2291	SNFSEKNAQLLAFENDDC	Homo sapiens

1555	9834	Type 1 Corticotropin releasing factor Receptor 1	NP_004373.1	1778	CESLSLASISDNGYRE	Homo sapiens
1556	9834	Corticotropin releasing factor Receptor 1	NP_004373.1	1779	CQEILNEEKSKVHYHVA	Homo sapiens
1557	10457	Frizzled-2	NP_001457.1	1774	NHSEDGAPALLTAPP	Homo sapiens
1558	10457	Frizzled-2	NP_001457.1	1775	GGAPPRVATLEHPFHC	Homo sapiens
1559	10457	Frizzled-2	NP_001457.1	1776	CEPARPDGSMFFSQEE	Homo sapiens
1560	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1082	AAREAGAAVRRPLGPE	Homo sapiens
1561	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1083	LYRPPPREKIGRRRA	Homo sapiens
1562	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1085	PRELAAGQSFHGCCLYR	Homo sapiens
1563	11968	Putative Leukocyte Platelet- Activating Factor Receptor (HUMNPIIY20)	AAB97766.1	1086	CKTVRLSDVRVPVNTYAR	Homo sapiens
1564	14198	Interleukin-8 Receptor B	P25025	802	EDFWKGEDLSNYSYS	Homo sapiens
1565	14198	Interleukin-8 Receptor B	P25025	803	PFELDAAPCEPESLE	Homo sapiens
1566	14198	Interleukin-8 Receptor B	P25025	804	RRTVSSNVSPACYE	Homo sapiens
1567	14198	Interleukin-8 Receptor B	P25025	805	SKDSLPKDSRPSFVGS	Homo sapiens
1568	14641	Calcitonin Receptor	P30988	766	PKPFLYVVGRRKKMMDAQYKC	Homo sapiens
1569	14641	Calcitonin Receptor	P30988	769	VEVVPNGELVRRDPVSC	Homo sapiens
1570	14641	Calcitonin Receptor	P30988	771	KIQWNGRWGRRPSNRS	Homo sapiens
1571	14641	Calcitonin Receptor	P30988	772	CHQEPRNEPANNQGEESAE	Homo sapiens
1572	16041	C-C Chemokine Receptor 6	P51684	355	TKSFRILSRITLPRSKIIC	Homo sapiens
1573	16041	C-C Chemokine Receptor 6	P51684	356	STFVFNQKYNTQGSVDCE	Homo sapiens
1574	16041	C-C Chemokine Receptor 6	P51684	357	TAANLGKMINRSCQSE	Homo sapiens
1575	16041	C-C Chemokine Receptor 6	P51684	358	RYSENISRQITSETADNDNAS	Homo sapiens
1576	16599	Smoothed	NP_005622.1	2595	CPLAPPELHPPAPAP	Homo sapiens
1577	16599	Smoothed	NP_005622.1	2666	CAIVERERGWPDLR	Homo sapiens
1578	16599	Smoothed	NP_005622.1	2667	CTNEVQNIKFNSSGQ	Homo sapiens
1579	16599	Smoothed	NP_005622.1	2668	CEVPLVRTDNPKSWYE	Homo sapiens
1580	16599	Smoothed	NP_005622.1	2669	CRADGTMRLGPTSNE	Homo sapiens

1581	16599	Smoothed	NP_005622.1	2670	EAEISPELQKRLGRKK	Homo sapiens
1582	16599	Smoothed	NP_005622.1	2671	ANVTIGLPTKQIPDC	Homo sapiens
1583	17250	G Protein-Coupled Receptor GPR45	O43898	1227	SNASDSGSTQLPAPLR	Homo sapiens
1584	17250	G Protein-Coupled Receptor GPR45	O43898	1228	CVLGYTELPADRAYVV	Homo sapiens
1585	17250	G Protein-Coupled Receptor GPR45	O43898	1249	LNTVRKNAVRVHNQSD	Homo sapiens
1586	17250	G Protein-Coupled Receptor GPR45	O43898	1272	KVPERIRRIQIPSTVYC	Homo sapiens
1587	17250	G Protein-Coupled Receptor GPR45	O43898	1273	DSLDRQLTRAGLRRL	Homo sapiens
1588	17345	G Protein-Coupled Receptor D6	LR13	363	EDADAENSSFYYDYLDE	Homo sapiens
1589	17345	G Protein-Coupled Receptor D6	LR13	364	DKYLEIVHAQPHYRLRTR	Homo sapiens
1590	17345	G Protein-Coupled Receptor D6	LR13	365	CVLVRLRPAGQGGRALK	Homo sapiens
1591	17345	G Protein-Coupled Receptor D6	LR13	366	DLGERQSENYPNKEDVGNK	Homo sapiens
1592	17535	Gaba(b) Receptor 1	O95375	188	EKLTKRLKRHPETGGFQEA	Homo sapiens
1593	17535	Gaba(b) Receptor 1	O95375	189	KKEEKKEWRKTILEPWK	Homo sapiens
1594	17535	Gaba(b) Receptor 1	O95375	190	DPLHRTIETFAKEPKEDID	Homo sapiens
1595	17535	Gaba(b) Receptor 1	O95375	191	YEIEYVCRGEREVVGPVKVRK	Homo sapiens
1596	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1205	SLWETVQKWREYRRQC	Homo sapiens
1597	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1206	LQKDNSSLPWRDLSEC	Homo sapiens
1598	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1208	CIWVSKLKANLMCKTD	Homo sapiens
1599	17666	Glucagon-Like Peptide 1 Receptor	AAA17021.1	1209	RWRLEHLHIQRDSSMKPLKC	Homo sapiens
1600	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1520	CQVDETEEPDVHLPQP	Homo sapiens
1601	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1521	REGLEAAGAAGASAAAYSS	Homo sapiens
1602	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1522	KLPSARAKIRITSSPI	Homo sapiens
1603	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1523	ESKSSIKRVLAITTVLS	Homo sapiens

1604	18471	Receptor LOC51210	NP_057456.1	1524	QGTLEILYPDAHLSAED	Homo sapiens
1605	18471	G Protein-Coupled Receptor LOC51210	NP_057456.1	1525	PKTPLKERISLPSRRS	Homo sapiens
1606	19072	G Protein-Coupled Receptor LOC51210	ENSP00000164265	2030	SVVQLRRQRDPDFEWNEGLC	Homo sapiens
1607	19072	Receptor Ls19072	ENSP00000164265	2032	PAVGWHDTSERFYTHGC	Homo sapiens
1608	19072	G Protein-Coupled Receptor Ls19072	ENSP00000164265	2047	AVQVGRQADRRRAFTVPT	Homo sapiens
1609	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1513	EHEPAGEEALRQKRAVATK	Homo sapiens
1610	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1514	ALRQKRAVATKSPTAE	Homo sapiens
1611	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1515	CEKEVLSSNVSWRYEEQQLE	Homo sapiens
1612	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1518	RLANITGGWDSSGCVWEED	Homo sapiens
1613	19501	G Protein-Coupled Receptor KIAA0758	Q9UIZ3	1519	CKQEKSLFQISKSIG	Homo sapiens
1614	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2164	CTAFQRREGGVPGTRPGSPG	Homo sapiens
1615	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2166	APGTRASRRCDRAGRWE	Homo sapiens
1616	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2167	CPAERVANNRGDFRWPR	Homo sapiens
1617	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2171	QNPPEPEPPADQQLRFRC	Homo sapiens
1618	21632	G Protein-Coupled Receptor Ls21632	BAA96055.1	2175	VPLGGGAPGTRASRRC	Homo sapiens
1619	22315	G Protein-Coupled Receptor GPR92/GPR93	LR29	425	PAARVHRPSRCRYRD	Homo sapiens
1620	22315	G Protein-Coupled Receptor GPR92/GPR93	LR29	426	TLARPDATGSQRRRKTVRL	Homo sapiens
1621	22315	G Protein-Coupled Receptor GPR92/GPR93	LR29	427	RSKLVAASVPARDVRG	Homo sapiens
1622	22315	G Protein-Coupled Receptor GPR92/GPR93	LR29	428	AQSERSAVTTDATRPD	Homo sapiens

1623	22925	Latrophilin-3	O94867	1138	CSGKSTESSIGSGKTSGSR	Homo sapiens
1624	22925	Latrophilin-3	O94867	1140	ENHQPHHYTRRRIPQD	Homo sapiens
1625	22925	Latrophilin-3	O94867	1141	ESVTSTQTEPPPAKC	Homo sapiens
1626	22925	Latrophilin-3	O94867	1497	SSASLNREGLLNARD	Homo sapiens
1627	25359	G Protein-Coupled Receptor GPR34	O95853	1255	DRYKINRSIQQRKAIT	Homo sapiens
1628	25359	G Protein-Coupled Receptor GPR34	O95853	1257	CFHYRDKHNAKGEAIFN	Homo sapiens
1629	25359	G Protein-Coupled Receptor GPR34	O95853	1258	RISKRRSKFPNSGKYA	Homo sapiens
1630	25359	G Protein-Coupled Receptor GPR34	O95853	1259	CQLLRRRFQGEPSRSESTSE	Homo sapiens
1631	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2721	RLQEIILTFEKINKTR	Homo sapiens
1632	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2722	KGKSRRAENASLGPTN	Homo sapiens
1633	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2723	LLFGTIMDHKIRDALR	Homo sapiens
1634	30698	G Protein-Coupled Receptor Ls30698	CAC27252.1	2724	RPSIGSSKSQDVVIMIRI	Homo sapiens
1635	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1579	KLPNNELHGGQESHNSGN	Homo sapiens
1636	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1580	SGNIRSDGPGKNITLHNEFD	Homo sapiens
1637	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1581	RQFISQSSRK(RKH)NQSIR	Homo sapiens
1638	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1582	SHLDRLDESAAQKILYYC	Homo sapiens
1639	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1584	CRSFSRRILFKKSNIRTRSE	Homo sapiens
1640	30875	G Protein-Coupled Receptor GPR87/GPR95	NP_076404.1	1585	ESIRSLQSVRRSEVRVIYD	Homo sapiens
1641	31568	G Protein-Coupled Receptor RE2	O75963	331	CRKELSNLITEEGGEGGV	Homo sapiens
1642	31568	G Protein-Coupled Receptor RE2	O75963	332	EEDAQRIGRKNSSTSTSS	Homo sapiens
1643	31568	G Protein-Coupled Receptor RE2	O75963	333	CFGDRYVREPFVQRQRISR	Homo sapiens
1644	31568	G Protein-Coupled Receptor RE2	O75963	334	HSSSTGDTGFSCSQDQSGNL	Homo sapiens

1645	36534	Receptor RE2	O75473	1232	CQKLQKIDLRHNEIVEIKVD	Homo sapiens
1646	36534	G Protein-Coupled Receptor GPR49	O75473	1233	NKGDNSSMDDLHKKDA	Homo sapiens
1647	36534	G Protein-Coupled Receptor GPR49	O75473	1234	QDERDLEDFLLDFFED	Homo sapiens
1648	36534	G Protein-Coupled Receptor GPR49	O75473	1235	ERGFVKYSAKFETKA	Homo sapiens
1649	36534	G Protein-Coupled Receptor GPR49	O75473	1236	RSKHPSLMSINSDDVEKQSC	Homo sapiens
1650	37498	Xenotropic and Polytypic Retrovirus Receptor (XPR1)	NP_004727.1	2597	DAQKESTGVTLRQRR	Homo sapiens
1651	37498	Xenotropic and Polytypic Retrovirus Receptor (XPR1)	NP_004727.1	2600	CKKINGLISETEAVVTN	Homo sapiens
1652	37498	Xenotropic and Polytypic Retrovirus Receptor (XPR1)	NP_004727.1	2610	ADDQTILLEQMMMDQDDG	Homo sapiens
1653	37498	Xenotropic and Polytypic Retrovirus Receptor (XPR1)	NP_004727.1	2672	KYNQSIISLRPRLASQ	Homo sapiens
1654	37498	Xenotropic and Polytypic Retrovirus Receptor (XPR1)	NP_004727.1	2673	KRYFAKFEKFFQTC	Homo sapiens
1655	37498	Xenotropic and Polytypic Retrovirus Receptor (XPR1)	NP_004727.1	2674	DGDRQKAMKRLRVPPL	Homo sapiens
1656	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2103	RVRSGRVRVSSTRDFQDC	Homo sapiens
1657	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2105	CNNSVPGKEHPFDITVMIRE	Homo sapiens
1658	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2106	APSKPGLPKQAIVPRKVD	Homo sapiens
1659	40881	Lung Seven Transmembrane Receptor 2 (LUSTR2)	CAC28410.1	2135	AASKPKSTPAVIQGPSGKD	Homo sapiens
1660	42697	G Protein-Coupled Receptor GPR64	O00406	1261	KRSELNKLQTLSETYFIMC	Homo sapiens
1661	42697	G Protein-Coupled Receptor GPR64	O00406	1262	GNASTERNGVSFSVQNGDVC	Homo sapiens
1662	42697	G Protein-Coupled Receptor GPR64	O00406	1263	CRIRKKKQLGAQRKTSIQD	Homo sapiens
1663	42697	G Protein-Coupled Receptor GPR64	O00406	1264	DTGKQHMIFNEKEDSC	Homo sapiens

1664	45937	KIAA1624 Protein	AAK57695	2072	PNVNPASAGNQTKQTQD	Homo sapiens
1665	45937	KIAA1624 Protein	AAK57695	2073	RVKSPPEAGTQLPKIIFS	Homo sapiens
1666	45937	KIAA1624 Protein	AAK57695	2074	KDGYMVVNVVSSLSNEPED	Homo sapiens
1667	45937	KIAA1624 Protein	AAK57695	2076	RSTVDSKAMGEKSFVHNING	Homo sapiens
1668	50847	Neurotensin Receptor type 2	O95665	1265	CQPLRARSLTIPRTR	Homo sapiens
1669	50847	Neurotensin Receptor type 2	O95665	1266	GQKHELETADGEPEPARVC	Homo sapiens
1670	50847	Neurotensin Receptor type 2	O95665	1267	KKTFIQGGQVSLVRHKD	Homo sapiens
1671	50847	Neurotensin Receptor type 2	O95665	1269	CGEHHPMKRLPPKPQSP	Homo sapiens
1672	50847	Neurotensin Receptor type 2	O95665	2294	STSTPGSSTPSRLELLSEE	Homo sapiens
1673	50847	Neurotensin Receptor type 2	O95665	2301	METSSPRPPRPSSNPG	Homo sapiens
1674	50847	Neurotensin Receptor type 2	O95665	2302	CSQVPSTSTPGSSTPSR	Homo sapiens
1675	53440	G Protein-Coupled Receptor LS53440	LR76	1850	DPNGNESSATYFILIG	Homo sapiens
1676	53440	G Protein-Coupled Receptor LS53440	LR76	1851	RHATVLTLPRTKIGV	Homo sapiens
1677	53440	G Protein-Coupled Receptor LS53440	LR76	1852	ILKTVLGLTREAGAKA	Homo sapiens
1678	53440	G Protein-Coupled Receptor LS53440	LR76	1853	HRFSKRDRDSPLPVILAN	Homo sapiens
1679	53440	G Protein-Coupled Receptor LS53440	LR76	1854	KEIRQRILRLFHVATHASE	Homo sapiens
1680	54053	Gaba(b) Receptor 2	O75899	1416	GEDIEISDTESFSNDPC	Homo sapiens
1681	54053	Gaba(b) Receptor 2	O75899	1417	SSKQIKTISGKTPQQYE	Homo sapiens
1682	54053	Gaba(b) Receptor 2	O75899	1419	AATQNRFRQFTQNKKE	Homo sapiens
1683	54053	Gaba(b) Receptor 2	O75899	1420	CKDPIEDINSPEHIQRR	Homo sapiens
1684	55728	ETL protein	NP_071442.1	2113	CVLSRKIQEEYVRLFKNV	Homo sapiens
1685	55728	ETL protein	NP_071442.1	2114	CIAANINKTLIKIRSIKEP	Homo sapiens
1686	55728	ETL protein	NP_071442.1	2115	KLNVNHRRTHLTKLMHTVE	Homo sapiens
1687	55728	ETL protein	NP_071442.1	2116	EKITFTLSHRKVTDYRSLC	Homo sapiens
1688	55728	ETL protein	NP_071442.1	2117	SSSLLGYKNNTISAKD	Homo sapiens
1689	56923	Muscarinic acetylcholine	P20309	1421	CSSVELQQQSMKRSNRRK	Homo sapiens

1690	56923	Receptor M3	P20309	1422	KPSSEQMDQDHSSSDSWNNN	Homo sapiens
1691	56923	Muscarinic acetylcholine Receptor M3	P20309	1423	DLERKADKLQAQKSVD	Homo sapiens
1692	56923	Muscarinic acetylcholine Receptor M3	P20309	1424	KEATLAKRFALKTRSQ	Homo sapiens
1693	57180	Muscarinic acetylcholine Receptor M3	NP_062813.1	2097	PPTCRPRRMSVCYRPPGNE	Homo sapiens
1694	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2098	CLAVTRPFLAPRLRSPALAR	Homo sapiens
1695	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2099	RGARWGSGRHGARGVR	Homo sapiens
1696	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2100	TAGDLLPRAGPRFLTR	Homo sapiens
1697	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2101	EGSGEARGGGRSREGTME	Homo sapiens
1698	57180	Leukotriene B4 Receptor BLTR2	NP_062813.1	2102	RTTPQLKVVGGGRNGD	Homo sapiens
1699	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1909	RSAPTALSRRLRARTHLPGC	Homo sapiens
1700	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1910	VRGSHGEFDPASLMPRSC	Homo sapiens
1701	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1911	RKEDSVLMEATSGGPTSFR	Homo sapiens
1702	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1912	DQNKADIGGMLPGLTVRSV	Homo sapiens
1703	73584	Cadherin EGF LAG Seven-Pass G-Type Receptor 1 (CELSR1/Flamingo)	NP_055061.1	1913	PAGWPDQSLAESDSEDPG	Homo sapiens
1704	74514	5-HT5A Receptor	NP_076917.1	2118	ETNHSLGKDDLPPSSP	Homo sapiens
1705	74514	5-HT5A Receptor	NP_076917.1	2119	SLVHELSGRRWQLGRRLC	Homo sapiens
1706	74514	5-HT5A Receptor	NP_076917.1	2120	LLFGWGETYSEGSEEC	Homo sapiens
1707	74514	5-HT5A Receptor	NP_076917.1	2121	FRVGSRTKNSVSPISE	Homo sapiens
1708	74514	5-HT5A Receptor	NP_076917.1	2122	RHATVTFQPEGDTWREQK	Homo sapiens

1709	81765	Thromboxane A2 Receptor	P21731	1277	GITRPFSPAVASQRR	Homo sapiens
1710	81765	Thromboxane A2 Receptor	P21731	1278	CHVHGQEAAGQRPRDSEVE	Homo sapiens
1711	81765	Thromboxane A2 Receptor	P21731	1279	RNPPAMSPAGQLSRTE	Homo sapiens
1712	81765	Thromboxane A2 Receptor	P21731	1280	RRLQPRLSRPRRVSCL	Homo sapiens
1713	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	155	RYLSVVSPLSLRVPTLRC	Homo sapiens
1714	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	156	SSILDTFHKVLSSGCDYSE	Homo sapiens
1715	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	157	VEILRTLFRSRKRHRHTVK	Homo sapiens
1716	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	158	QTLFRTQIIRSCEAKQQL	Homo sapiens
1717	98519	Chemokine (C motif) XC Receptor 1 (CCXCR1)	AAA62837.1	159	RLQAPSPASIPSPGAFAYE	Homo sapiens
1718	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1589	RIEYVYSVNSSPSQEE	Homo sapiens
1719	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1590	IMIAQTLRKNAQVRKC	Homo sapiens
1720	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1591	RNGNYNKLQHVQTRGYTKS	Homo sapiens
1721	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1592	SRLQLVSAINLSTAKD	Homo sapiens
1722	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1593	CKQKTRLRAMGKGNLEVNIR	Homo sapiens
1723	130108	G Protein-Coupled Receptor GPR75	NP_006785.1	1594	NSAYMLSPKPKKFFVDQAC	Homo sapiens
1724	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1218	CKVQDSNRRKMLPTQF	Homo sapiens
1725	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1219	HAVSLTKLVRGRKPLS	Homo sapiens
1726	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1220	NVNVFELSAPRRNED	Homo sapiens
1727	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1221	TKQRNPMDYVPVEDAFC	Homo sapiens
1728	133117	G Protein-Coupled Receptor RAIG1	AAC98506.1	1222	CKPQLVKKSYGVENRA	Homo sapiens
1729	152198	Tachykinin Receptor 2	AAB05897.1	1286	RRVPGHQAHAHANLRH	Homo sapiens
1730	152198	Tachykinin Receptor 2	AAB05897.1	1287	KEDKLEITPTLSLRVNR	Homo sapiens
1731	152198	Tachykinin Receptor 2	AAB05897.1	1288	KETLFMAGDTAPSEATSGEA	Homo sapiens

1732	152198	Tachykinin Receptor 2	AA805897.1	1290	CVVAWPEDSGGKTILL	Homo sapiens
1733	152201	Thyrotropin Receptor	P16473	1445	RQRKSVNALNSPLHQE	Homo sapiens
1734	152201	Thyrotropin Receptor	P16473	1446	KFQDTHNNAHYVFFEEQED	Homo sapiens
1735	152201	Thyrotropin Receptor	P16473	1449	CHVKIVTVRNPNQYNPGDK	Homo sapiens
1736	152201	Thyrotropin Receptor	P16473	1450	CKRQAQAYRGQRVPPKNSTD	Homo sapiens
1737	152245	C-C Chemokine Receptor 2	NP_000639.1	1896	SRSRFRNTNESGEEVTI	Homo sapiens
1738	152245	C-C Chemokine Receptor 2	NP_000639.1	1898	CQKEDSVVCGPYFPRGWNN	Homo sapiens
1739	152245	C-C Chemokine Receptor 2	NP_000639.1	1899	SGEEVTFFEDYDYGAPCHKF	Homo sapiens
1740	152299	Interleukin-8 Receptor A	P25024	806	DFDDLNTFGMPPADEDYSPC	Homo sapiens
1741	152299	Interleukin-8 Receptor A	P25024	807	CWGLSMNLSPFLFRQAYH	Homo sapiens
1742	152299	Interleukin-8 Receptor A	P25024	808	RHRVTSYTSSVNVSSN	Homo sapiens
1743	152299	Interleukin-8 Receptor A	P25024	1490	CMLETETLNKYVVIAYALV	Homo sapiens
1744	158822	Mas Proto-Oncogene	NP_002368.1	1527	EEPTNISTGRNASVGNHRQ	Homo sapiens
1745	158822	Mas Proto-Oncogene	NP_002368.1	1528	RRNPTVWTHLSIAD	Homo sapiens
1746	158822	Mas Proto-Oncogene	NP_002368.1	1529	YVMCIDREEESHNRNDCRAV	Homo sapiens
1747	158822	Mas Proto-Oncogene	NP_002368.1	1530	SSTILVVKIRKNTWASHSK	Homo sapiens
1748	158822	Mas Proto-Oncogene	NP_002368.1	1531	TRAFKDEMQPRRQKDNC	Homo sapiens
1749	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1578	ERYLGVAFPVQYKLSRRL	Homo sapiens
1750	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1586	QYLNTEQVRSGNEITC	Homo sapiens
1751	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1588	EGTNEDRGVGGQEGEMPSSD	Homo sapiens
1752	159152	G Protein-Coupled Receptor GPR43	NP_005297.1	1616	RGLQVLRNQGSLLGRRGKD	Homo sapiens
1753	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1292	KQCLEEAQLENETIGCS	Homo sapiens
1754	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1296	KDLALFDSGESDQCSE	Homo sapiens
1755	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1297	LQKLPPDIRKSDSSP	Homo sapiens
1756	159973	Vasoactive Intestinal Polypeptide Receptor 1	P32241	1298	NPKYRHPSGGSGNGATC	Homo sapiens
1757	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1299	KVFSNFYSKAGNISKNC	Homo sapiens
1758	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1301	CGYSDPEDESKITFYI	Homo sapiens
1759	160040	Vasoactive Intestinal Polypeptide Receptor 2	P41587	1305	KRKWRSRCPTPSASRD	Homo sapiens

1760	160040	Polypeptide Receptor 2 Vasoactive Intestinal	P41587	1306	CGSFSRNGSEGAHQFHR	Homo sapiens
1761	160055	Polypeptide Receptor 2 Motilin Receptor (GPR38)	AAC26081.1	132	REPPWPALPPCDERRCS	Homo sapiens
1762	160055	Motilin Receptor (GPR38)	AAC26081.1	134	SPSPGPETAEEAAALFSREC	Homo sapiens
1763	160055	Motilin Receptor (GPR38)	AAC26081.1	135	SSRRPLRGPAASGRERGRHQ	Homo sapiens
1764	160055	Motilin Receptor (GPR38)	AAC26081.1	136	RKSRPRGFHRSRDTAG	Homo sapiens
1765	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1595	NPLVTGYLGRGPGLKTVC	Homo sapiens
1766	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1596	GRYLGAAPFLGYQAFRRPC	Homo sapiens
1767	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1597	CLEAWDPASAGPARFS	Homo sapiens
1768	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1598	CLRALARSGLTHRRKLR	Homo sapiens
1769	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1599	NASNVASFLYPNLGGSWRK	Homo sapiens
1770	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1617	TVSLPLKAVEALASGA	Homo sapiens
1771	160059	G Protein-coupled Receptor GPR40	NP_005294.1	1618	DHSNTSLGINTPVGSPVC	Homo sapiens
1772	160189	G Protein-Coupled Receptor GPR54	BAB55446	1926	CSEAFPSRALERAFALY	Homo sapiens
1773	160189	G Protein-Coupled Receptor GPR54	BAB55446	1927	ERAGAVRAKVSRLVAWV	Homo sapiens
1774	160189	G Protein-Coupled Receptor GPR54	BAB55446	1928	RRPGSPDPAAPHAELHRLGS	Homo sapiens
1775	160189	G Protein-Coupled Receptor GPR54	BAB55446	1929	GAPANASGCPGCGANASD	Homo sapiens
1776	160202	Adrenomedullin Receptor (ADMR)	O15218	390	DLFNHTLSECHVELSQST	Homo sapiens
1777	160202	Adrenomedullin Receptor (ADMR)	O15218	391	NVLTACRLRQPGQPKRRHC	Homo sapiens
1778	160202	Adrenomedullin Receptor (ADMR)	O15218	392	KDQTKAGTCASSSSCSTG	Homo sapiens
1779	160202	Adrenomedullin Receptor (ADMR)	O15218	484	KGDSQPAAAAPHPEPSLS	Homo sapiens
1780	160204	G Protein-Coupled Receptor RTA	LR85	1977	CRARRRQRSTKLNHVILA	Homo sapiens

1781	160204	G Protein-Coupled Receptor RTA	LR85	1983	CPGLSEAPELYRRGFLTIEQ	Homo sapiens
1782	160204	G Protein-Coupled Receptor RTA	LR85	1985	RDGAELGEAGGSTPNTVT	Homo sapiens
1783	160204	G Protein-Coupled Receptor RTA	LR85	2173	LAGRDKSQRLWEPLRV	Homo sapiens
1784	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1678	RTTRKWNWGCTHCYLAFNDS	Homo sapiens
1785	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1679	RAKLLREGVWVHANRPKR	Homo sapiens
1786	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1680	RRVMLKEYHPRMLLI	Homo sapiens
1787	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1682	SALARAFGEEFLSSC	Homo sapiens
1788	160206	G Protein-Coupled Receptor GPR32	NP_001497.1	1683	RSCSRKMNSSGCLSEE	Homo sapiens
1789	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	151	PGPDRDATCNSRQAALAVSK	Homo sapiens
1790	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	152	SSHAAVSLRLQHRGRRRPGR	Homo sapiens
1791	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	153	DDSELGGAGSSRRRTSSIA	Homo sapiens
1792	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	AAD21055.1	154	DGPPEPGAEOHLELEPGRR	Homo sapiens
1793	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2220	CPILEQMSRLQSHSNTSIRY	Homo sapiens
1794	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2221	RYIDHAAVLLHGLASLLGLV	Homo sapiens
1795	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2222	CRMIRQTVVTTWV/LHLALSDL	Homo sapiens
1796	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2223	SASLPFFTYFLAVGHSWE	Homo sapiens
1797	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2224	CLVLWALAVLNTVPYFVRD	Homo sapiens
1798	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2225	CYYNVLLNPGPDRDAT	Homo sapiens
1799	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2226	CNSRQAALAVSKFLAFLVP	Homo sapiens
1800	160210	G Protein-Coupled Receptor GPR44 (CRTH2)	NP_004769.1	2228	RGLPFTVSLAFFNSVANPVL	Homo sapiens

1801	160210	Receptor GPR44 (CRTH2) G Protein-Coupled	NP_004769.1	2229	CSRPEPRGPALLGWLLGS	Homo sapiens
1802	160210	Receptor GPR44 (CRTH2) G Protein-Coupled	NP_004769.1	2230	CAASPQTGPLNRLSS	Homo sapiens
1803	160212	Receptor GPR44 (CRTH2) G Protein-Coupled	Q9Y2T5	444	KEINDRRARFPSHEVDSSRE	Homo sapiens
1804	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	445	CVKDQEAQEPKPRKRANS	Homo sapiens
1805	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	446	RWTEWRILNMSSGIVNASER	Homo sapiens
1806	160212	Receptor GPR52 G Protein-Coupled	Q9Y2T5	622	HSCPLGFGHYSVVDVCIFE	Homo sapiens
1807	160217	Receptor GPR52 G Protein-Coupled	AAD22410.1	161	GKVEKVMCFHNMSDDTWSAK	Homo sapiens
1808	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	162	RSIHILLGRRDHTQDWVQQK	Homo sapiens
1809	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	163	CRAKQSIFFLQLSM	Homo sapiens
1810	160217	Receptor GPR55 G Protein-Coupled	AAD22410.1	164	KEFRMINIRAHPRSRVQLVLQ	Homo sapiens
1811	160219	Receptor GPR55 G Protein-Coupled	AAC52028.1	2	AQRPTDVGQAEATRKAAR	Homo sapiens
1812	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	3	KEFQEASALAVAPRAKAHK	Homo sapiens
1813	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	123	GGFCFRSTRHNFNSMR	Homo sapiens
1814	160219	Receptor GPR35 G Protein-Coupled	AAC52028.1	125	ETIRRALYITSLSDANC	Homo sapiens
1815	160221	Receptor GPR35 G Protein-Coupled	LR6	335	FPPVLDGGGDEDEAPCALEQ	Homo sapiens
1816	160221	Receptor GPR27 G Protein-Coupled	LR6	338	RGARRLLVLEEFKTEKRLC	Homo sapiens
1817	160221	Receptor GPR27 G Protein-Coupled	LR6	496	NASEPGSGGGGEEAALGLK	Homo sapiens
1818	160221	Receptor GPR27 G Protein-Coupled	O54897	515	GLRALACLPVAMLAARRA	Mus musculus
1819	160221	Receptor GPR27 G Protein-Coupled	LR6	1291	RPAGPGRGARRLLVLE	Homo sapiens

1820	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1606	CQRPPKQEDGGQSPV	Homo sapiens
1821	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1607	CNMIGDVTTEQYFALRRK	Homo sapiens
1822	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1610	EGRADQSAEAAALAVP	Homo sapiens
1823	160222	G Protein-Coupled Receptor GPR72	NP_057624.1	1611	QNFVGRRRYGAEQNPTVK	Homo sapiens
1824	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1600	RIFRSIKQSMGLSAAQKAK	Homo sapiens
1825	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1601	CDRFVAVVVALESRRR	Homo sapiens
1826	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1604	ATDHSRQEVSRHKGWKE	Homo sapiens
1827	160223	G Protein-Coupled Receptor G2A	NP_037477.1	1605	KTDVTRLTHSRDTEELQS	Homo sapiens
1828	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	403	ETQEQQSRSKRGTEDEEAK	Homo sapiens
1829	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	404	SPNPDKDDGGTPDSGQELR	Homo sapiens
1830	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	405	CQLVTWRVRGPPGRKSE	Homo sapiens
1831	160224	Endothelin Type B Receptor-Like Protein 2 (ETBR-LP-2)	O60883	406	AANGSDNKLKTEVSS	Homo sapiens
1832	160225	Sphingolipid Receptor Edg6	CAA04118.1	70	PRDSFRGSRSLSRMRE	Homo sapiens
1833	160225	Sphingolipid Receptor Edg6	CAA04118.1	71	ERFATMVRPVAESGATKTSR	Homo sapiens
1834	160225	Sphingolipid Receptor Edg6	CAA04118.1	72	RLVQASGGQKAPRPAAR	Homo sapiens
1835	160225	Sphingolipid Receptor Edg6	CAA04118.1	73	RAVEAHSGASTDSSLRPDR	Homo sapiens
1836	160225	Sphingolipid Receptor Edg6	CAA04118.1	1914	IFRLVQASGGQKAPRPAAR	Homo sapiens
1837	160225	Sphingolipid Receptor Edg6	CAA04118.1	1915	DSSLRPDRSFRGSRSLSRM	Homo sapiens
1838	160225	Sphingolipid Receptor Edg6	CAA04118.1	1916	RSLSRMIREPLSSSVR	Homo sapiens
1839	160225	Sphingolipid Receptor Edg6	CAA04118.1	1917	GPEDGGGLGALRGLSVAASC	Homo sapiens
1840	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1625	ANIGSLCVSFLQPKKE	Homo sapiens
1841	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1626	ETIFNAVMLWEDETVE	Homo sapiens
1842	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1627	CNRKVYQAVRHNKATENKE	Homo sapiens

1843	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1628	CILEHAVNFEDHSNSGKR	Homo sapiens
1844	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	1629	CNTSQRQRKRILSVSTKD	Homo sapiens
1845	160228	T-Cell Death-Associated Gene 8 (GPR65)	NP_003599.1	2303	CDAEKSNFLCYDYKVPLEK	Homo sapiens
1846	160300	Encephalopsin	NP_055137.1	2131	CTVDWKSNDANDSSFV	Homo sapiens
1847	160300	Encephalopsin	NP_055137.1	2132	CVEDLQTIQVILKLYEK	Homo sapiens
1848	160300	Encephalopsin	NP_055137.1	2133	CQRPADLPAAAGSEMQRIP	Homo sapiens
1849	160300	Encephalopsin	NP_055137.1	2134	TSELSVDDSDKTIG	Homo sapiens
1850	160312	Spingolipid Receptor Edg5	O95136	1018	ERHVAIAKVLYGSDKSC	Homo sapiens
1851	160312	Spingolipid Receptor Edg5	O95136	1019	RSRDLRREVLRLPLQC	Homo sapiens
1852	160312	Spingolipid Receptor Edg5	O95136	1020	QEHVNYTKETLETQET	Homo sapiens
1853	160312	Spingolipid Receptor Edg5	O95136	1021	GRRRVGTPGHHLLPLR	Homo sapiens
1854	160314	G Protein-Coupled Receptor GPR103	ENSMPRT221753	1922	MMRKKAKFSLRENIPVEETKG	Homo sapiens
1855	160314	G Protein-Coupled Receptor GPR103	ENSMPRT221753	1923	MMIEYSNFEKEYDDVTIKM	Homo sapiens
1856	160314	G Protein-Coupled Receptor GPR103	ENSMPRT221753	1924	CEQTEEEKKLRHLALRSE	Homo sapiens
1857	160314	G Protein-Coupled Receptor GPR103	ENSMPRT221753	1925	KKRVGDGSLVLRTHGKEMSK	Homo sapiens
1858	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	463	DRARRERFIMNEKWDINSSE	Homo sapiens
1859	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	464	RKNQEQWHVVSRRKQKLIK	Homo sapiens
1860	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	465	RKSAEKPQQLVMEELKE	Homo sapiens
1861	160317	Neuropeptide FF 2 Receptor	Q9Y5X5	500	RQSAGDRRLGLSLRQTAK	Homo sapiens
1862	160324	G Protein-Coupled Receptor	NP_076403.1	1619	DRFLKIIRPLRNIFLKKP	Homo sapiens
1863	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1620	MILSNKEATPSSVKKC	Homo sapiens
1864	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1622	VYDSYRKSCKDRKNN	Homo sapiens
1865	160324	GPR86/GPR94/P2Y13 G Protein-Coupled Receptor	NP_076403.1	1623	ARVPYTHSQTNNTKDC	Homo sapiens

1866	160324	G Protein-Coupled Receptor	NP_076403.1	1624	CMQGRKTTASSQENHSSQTD	Homo sapiens
1867	160329	GPR86/GPR94/P2Y13 Proteinase-Activated Receptor 4	O76067	1308	CANDSTILELPDSSRA	Homo sapiens
1868	160329	Proteinase-Activated Receptor 4	O76067	1309	PLRARALRGRRALGLC	Homo sapiens
1869	160329	Proteinase-Activated Receptor 4	O76067	1310	LQRQTFRLARSDRVLC	Homo sapiens
1870	160329	Proteinase-Activated Receptor 4	O76067	1311	RDKVRAGLFQRSPGDT	Homo sapiens
1871	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1213	CELKRDQLQLLSQFLKHPQK	Homo sapiens
1872	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1214	TSVRFMGDMVSFEEDR	Homo sapiens
1873	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1215	RQEEEQSEIMEYSVLLP	Homo sapiens
1874	160330	G Protein-Coupled-Receptor TM7XN1/GPR56	Q9Y653	1216	RTLFQRTKGRSGEAEKR	Homo sapiens
1875	160387	Glucagon-Like Peptide 2 Receptor	O95838	1312	GSILLEETTRKWAQYKQAC	Homo sapiens
1876	160387	Glucagon-Like Peptide 2 Receptor	O95838	1313	QTIENTADIWQDDSEC	Homo sapiens
1877	160387	Glucagon-Like Peptide 2 Receptor	O95838	1315	CPKKLSEGDGAEKLRK	Homo sapiens
1878	160387	Glucagon-Like Peptide 2 Receptor	O95838	1316	QQDHARWPRGSSLSEC	Homo sapiens
1879	160388	Latrophilin-1	O94910	1121	EPTSTHSEHGSGAWC	Homo sapiens
1880	160388	Latrophilin-1	O94910	1126	CEPREVRRVQWPATQQ	Homo sapiens
1881	160388	Latrophilin-1	O94910	1129	RSQDFPPGDDGGPEPPR	Homo sapiens
1882	160388	Latrophilin-1	O94910	1131	CTAEDGATSRPLSSPPGRDS	Homo sapiens
1883	160388	Latrophilin-1	O94910	1706	RESAGKNYNKMHKRETC	Homo sapiens
1884	160388	Latrophilin-1	O94910	1707	RDSPSPDSSPEGPSEALP	Homo sapiens
1885	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1938	QVGPCRSLSRGRGSSGAC	Homo sapiens
1886	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1939	CRDAGTELIGHLVPHHDGLR	Homo sapiens

1887	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1940	CKLAQAPGLRAGERSPEESL	Homo sapiens
1888	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1942	RVSDTPEGVNSLDPSHGES	Homo sapiens
1889	160390	Cadherin EGF LAG Seven-Pass G-Type Receptor 2 (CELSR2)	NP_001399.1	1943	RSGKSQSPYIPFLREEES	Homo sapiens
1890	160397	Latrophilin-2	O95490	1132	CEALDSKGIKWPPQTQR	Homo sapiens
1891	160397	Latrophilin-2	O95490	1133	DILDAQLQELKPSEKD	Homo sapiens
1892	160397	Latrophilin-2	O95490	1136	RTHSLLYQPQKKV/KSE	Homo sapiens
1893	160397	Latrophilin-2	O95490	1137	RDSPYPESPDMEEEDL	Homo sapiens
1894	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1630	CQEQKMLRTLDSYNNIRD	Homo sapiens
1895	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1631	CDSYANLNTEDNSLQD	Homo sapiens
1896	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1632	KGTAADAANVTSTLENEE	Homo sapiens
1897	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1633	ERSLSAKDIMKNGKSNHLK	Homo sapiens
1898	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1634	CNLEKEDLENSQSSMIK	Homo sapiens
1899	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1635	KRRVTKKSGSVSVSIS	Homo sapiens
1900	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1636	CGTQSAHSDYADEEDS	Homo sapiens
1901	160411	G Protein-Coupled Receptor GPR48	NP_060960.1	1637	DEEDSFVSDSSDQVQAC	Homo sapiens
1902	160435	LS160435 Receptor	LR80	1918	ATILKLLRTEEAHGREQRR	Homo sapiens
1903	160435	LS160435 Receptor	LR80	1919	CRRVPRDTLDTRRRESLFSAR	Homo sapiens
1904	160435	LS160435 Receptor	LR80	1920	PLSSKRWRRRRYAVAAAC	Homo sapiens
1905	160435	LS160435 Receptor	LR80	1921	CRRMGPRSPSVIFMINL	Homo sapiens
1906	160889	Platelet Activating Receptor Homolog (H963)	O14626	1223	MMPIKDIKEKSNVGC	Homo sapiens
1907	160889	Platelet Activating Receptor Homolog (H963)	O14626	1224	CLVIRQLYRNKDNENYP	Homo sapiens
1908	160889	Platelet Activating Receptor Homolog (H963)	O14626	1225	CSTRISLFKAKEATLL	Homo sapiens

1909	160889	Homolog (H963) Platelet Activating Receptor	O14626	1226	ETFASPKETKAGKEKLR	Homo sapiens
1910	161024	Homolog (H963) Protein A	NP_062832.1	1690	ESRAVGLPLGLSAGRRC	Homo sapiens
1911	161024	Protein A	NP_062832.1	1691	EDARGKRSSLDGSESAK	Homo sapiens
1912	161024	Protein A	NP_062832.1	1692	RTWQECVAIMSEEDGD	Homo sapiens
1913	161024	Protein A	NP_062832.1	1693	CKVRFDANGATGPGSRD	Homo sapiens
1914	161024	Protein A	NP_062832.1	1694	RRLSHDETNIFFSTPRE	Homo sapiens
1915	161024	Protein A	NP_062832.1	1695	GGPPEYLGQRHRLDEED	Homo sapiens
1916	161024	Protein A	NP_062832.1	1696	REITTFIDETPLPSP	Homo sapiens
1917	161024	Protein A	NP_062832.1	1697	RRPRPLGSPRRLSLGSPE	Homo sapiens
1918	161214	Galanin Receptor GalR3	AAC35944.1	202	RYGALELCVPAWEDARR	Homo sapiens
1919	161214	Galanin Receptor GalR3	AAC35944.1	203	GAAAAEARRRATGRAGR	Homo sapiens
1920	161214	Galanin Receptor GalR3	AAC35944.1	204	ASRHFRARFRRLWPC	Homo sapiens
1921	161214	Galanin Receptor GalR3	AAC35944.1	205	RARRALRRVRPASSGPP	Homo sapiens
1922	161221	Urotensin-II Receptor (GPR14)	LR15	371	ERYAAVLRLPLDTVQRPKG	Homo sapiens
1923	161221	Urotensin-II Receptor (GPR14)	LR15	372	RAYRRSQRAFRRARRPGAR	Homo sapiens
1924	161221	Urotensin-II Receptor (GPR14)	LR15	373	RNYRDHLRGRVRGPGSG	Homo sapiens
1925	161221	Urotensin-II Receptor (GPR14)	LR15	374	RARFQRCSGRSLSCSPQPTD	Homo sapiens
1926	161249	G Protein-Coupled Receptor GPR66	LR20	394	ARGHFDPEDLNLIDEALRLK	Homo sapiens
1927	161249	G Protein-Coupled Receptor GPR66	LR20	395	IGLRLRRERLLMQEAKGRG	Homo sapiens
1928	161249	G Protein-Coupled Receptor GPR66	LR20	396	RGSAAAARSRYTCRLQQH	Homo sapiens
1929	161249	G Protein-Coupled Receptor GPR66	LR20	397	ALCLGACCHRLRPRHSS	Homo sapiens
1930	161251	Purinergic Receptor P2Y10	O00398	859	CFLLKPFRRARDWKRRYD	Homo sapiens
1931	161251	Purinergic Receptor P2Y10	O00398	860	PPILRSTDLNNKSC	Homo sapiens
1932	161251	Purinergic Receptor P2Y10	O00398	862	QLSRHGSSTRSRLMSKE	Homo sapiens
1933	161251	Purinergic Receptor P2Y10	O00398	863	LRQPPMAFQGISERQK	Homo sapiens
1934	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1672	YYDDLDDVDYEEAPC	Equine herpesvirus 2

1935	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1674	CDPYPEMSTNVWRRRAHVAK	Equine herpesvirus 2
1936	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1675	CYVVIIRLLRRPSKK	Equine herpesvirus 2
1937	161293	G Protein-Coupled Receptor Ls161293 (Herpes virus)	NP_042597.1	1676	CKYIPFLSGDGEKGEPT	Equine herpesvirus 2
1938	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1820	RNLITSSPAPTASPPAPS	Homo sapiens
1939	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1821	PSWTSPRPFGPAHPFLQPP	Homo sapiens
1940	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1822	RSSHQKRGTTDVDGSNVC	Homo sapiens
1941	177147	Neuromedin K Receptor-Like (NK-4R)	NP_006670.1	1823	KSTITASFVSSSHMSVEE	Homo sapiens
1942	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1317	TSSPFLMAKQKDEKNNTKC	Homo sapiens
1943	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1318	KKSMKKNLSSHKKAIG	Homo sapiens
1944	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1319	QRTIHLHLNETKPC	Homo sapiens
1945	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Q9Y271	1320	RKHSLSSVTYVPRKKASLPE	Homo sapiens
1946	177191	Histamine H3 Receptor	Q9Y5N1	474	RAVSYRAQQGDTRRAVRK	Homo sapiens
1947	177191	Histamine H3 Receptor	Q9Y5N1	475	QRRTRLRLDGAREAAGPE	Homo sapiens
1948	177191	Histamine H3 Receptor	Q9Y5N1	476	QSFTQRFRLSRDRKVA	Homo sapiens
1949	177191	Histamine H3 Receptor	Q9Y5N1	477	RYGVGEAAVGAEGEATLG	Homo sapiens
1950	177191	Histamine H3 Receptor	Q9Y5N1	1477	SSRGTERPRSLKRGSKPSAS	Homo sapiens
1951	177191	Histamine H3 Receptor	Q9Y5N1	1479	KPSASSASLEKRMKMVS	Homo sapiens
1952	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2052	RTILFSFYFRDTPRANR	Homo sapiens
1953	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2053	RPEMSRGLLAVRGAFV	Homo sapiens
1954	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2059	CAVLSHRRAGQPWALLLV	Homo sapiens
1955	177387	G Protein-Coupled Receptor ORF4	NP_064540.1	2733	RVLVSDSLFVICALSL	Homo sapiens

1956	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1014	KRKTNVLSPHITSGSIS	Homo sapiens
1957	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1015	CFSQENPERPRIPSTI	Homo sapiens
1958	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1016	SYKDEDMYGMTKMKMIC	Homo sapiens
1959	180956	Lysophosphatidic Acid Receptor Edg7	AAF00530.1	1017	VERHMSIMRMVRVHSN	Homo sapiens
1960	189873	G Protein-Coupled Receptor GPR78	LR37	443	CQRMDVTMKALALLAD	Homo sapiens
1961	189873	G Protein-Coupled Receptor GPR78	LR37	528	CSLRLPPEPERPRFAAFIAT	Homo sapiens
1962	189873	G Protein-Coupled Receptor GPR78	LR37	533	RGPLPPGICAHSAQGALRR	Homo sapiens
1963	189873	G Protein-Coupled Receptor GPR78	LR37	534	CRQAQARDLGAPWAVGLRSL	Homo sapiens
1964	189874	Neuromedin U Receptor 2	LR28	420	QQKLEDPFQKHINSTEE	Homo sapiens
1965	189874	Neuromedin U Receptor 2	LR28	422	KDKSLEADEGNANIQRPC	Homo sapiens
1966	189874	Neuromedin U Receptor 2	LR28	423	SQHDPQLPPAQRIIFLTC	Homo sapiens
1967	189874	Neuromedin U Receptor 2	LR28	487	ILHPFRAKLQSTRRRALR	Homo sapiens
1968	189884	G Protein-Coupled Receptor Ls189884	LR27	415	CKKRGTKTQNLNRNQIRSK	Homo sapiens
1969	189884	G Protein-Coupled Receptor Ls189884	LR27	418	EKPSSPSSGKGKTEKAE	Homo sapiens
1970	189884	G Protein-Coupled Receptor Ls189884	LR27	419	PSVQDNDPIPWEHEDQETGE	Homo sapiens
1971	189884	G Protein-Coupled Receptor Ls189884	LR27	486	KKPPTVSESQETPAGNSEG	Homo sapiens
1972	189884	G Protein-Coupled Receptor Ls189884	LR27	1832	LMSEEFREGKGVVK	Homo sapiens
1973	189884	G Protein-Coupled Receptor Ls189884	LR27	1833	GLPDKVPSPEPASIEPK	Homo sapiens
1974	189884	G Protein-Coupled Receptor Ls189884	LR27	1834	PDVEQFWHERDTPSVQ	Homo sapiens
1975	189884	G Protein-Coupled Receptor Ls189884	LR27	1835	RHHEGVEMCLVDVPAVAEE	Homo sapiens
1976	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1685	RVPQTPGPSTASGVPE	Homo sapiens
1977	189895	G Protein-Coupled	AAK12637.1	1686	ETPRQRSELSRSTMTVS	Homo sapiens

1978	189895	Receptor GPR61	AAK12637.1	1687	SSGAPQTTPHRTFGGK	Homo sapiens
1979	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1688	KPAPEEELRLPSREGSIEE	Homo sapiens
1980	189895	G Protein-Coupled Receptor GPR61	AAK12637.1	1689	CPSESWVSRPLSPKQE	Homo sapiens
1981	189900	Receptor GPR61				
1982	189900	Sphingolipid Receptor Edg8	LR1	312	TGKLRGARYQPGAGLRAD	Homo sapiens
1983	189900	Sphingolipid Receptor Edg8	LR1	316	ALERSLTIMARRGPAPVSS	Homo sapiens
1984	189900	Sphingolipid Receptor Edg8	LR1	317	DGSFSGSERSSPQRDGLD	Homo sapiens
1985	189901	Sphingolipid Receptor Edg8	LR1	318	CGRDPGSGQQSASAAEASG	Homo sapiens
		G Protein-Coupled Receptor Ls189901	ENSP000000071589	2266	ASRKAEAGIKLVQGEVS	Homo sapiens
1986	189901	(HEOAD54)				
		G Protein-Coupled Receptor Ls189901	ENSP000000071589	2270	SCLSYRVGTKPSASLR	Homo sapiens
1987	189901	(HEOAD54)				
		G Protein-Coupled Receptor Ls189901	ENSP000000071589	2271	RVDYVLLHETWRFGAAC	Homo sapiens
1988	189901	(HEOAD54)				
		G Protein-Coupled Receptor Ls189901	ENSP000000071589	2272	HQSRALLGLTRGRQGPVSD	Homo sapiens
1989	189901	(HEOAD54)				
		G Protein-Coupled Receptor Ls189901	ENSP000000071589	2273	CIHTRPWTSNTVFLVSL	Homo sapiens
1990	189901	(HEOAD54)				
		G Protein-Coupled Receptor Ls189901	ENSP000000071589	2274	RGRQGPVDESSYQPSR	Homo sapiens
1991	189904	(HEOAD54)				
		Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2108	IDRYLIKYPFREHLLQKKE	Homo sapiens
1992	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2109	TDNGITCNDFASSGDPN	Homo sapiens
1993	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2110	FLKQRNRQVATALPLE	Homo sapiens
1994	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2111	RNVRIASRLGSWKQYQC	Homo sapiens
1995	189904	Purinergic Receptor P2U2 (GPR91)	AAK29080.1	2112	GDHFRDMLMNQLRHNFKS	Homo sapiens

1996	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1721	CVAFPLAVGNPDLQIPSR	Homo sapiens
1997	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1722	NTLRHNAIRIHSYPEGIC	Homo sapiens
1998	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1723	QASKLGLMSLQRPFGMSID	Homo sapiens
1999	189920	G Protein-Coupled Receptor GPR63 (PSP24 beta)	AAK12639.2	1724	DMMPKSKFKFLPQLPGHTKRR	Homo sapiens
2000	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1715	QNLKDPVQIKIKHIRTQE	Homo sapiens
2001	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1716	KNKSGGWNTSGCVAHRD	Homo sapiens
2002	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1717	RNNNEWVGESYGKEKGDE	Homo sapiens
2003	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1718	CGRNGKRSNRILTREEVLR	Homo sapiens
2004	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1719	TSKSKSSSTYFKRNSHTD	Homo sapiens
2005	189945	G Protein-Coupled Receptor Dj287g14.2	Q9Y3K0	1720	DKSLKLAHADGDQTS	Homo sapiens
2006	190026	G Protein-Coupled Receptor JEG18	LR24	407	LFPLRTSDDTPGNRTKC	Homo sapiens
2007	190026	G Protein-Coupled Receptor JEG18	LR24	408	QDKYPMAQDLGEKQKALK	Homo sapiens
2008	190026	G Protein-Coupled Receptor JEG18	LR24	409	SFPLDFLVKSNEIKSC	Homo sapiens
2009	190026	G Protein-Coupled Receptor JEG18	LR24	410	RRRLSRQDLHDSIQLHAK	Homo sapiens
2010	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1725	KGEAKLDSRAKDVTLTIQE	Homo sapiens
2011	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1727	DHKEQPIVTENAERQLVVKD	Homo sapiens
2012	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1728	EDFEEQTLTLFLDGERERK	Homo sapiens
2013	190031	G Protein-Coupled Receptor VLGR1	AAD55586.1	1729	EGKEGDYIRIPERLLDVQD	Homo sapiens

2014	190168	Receptor VLGR1	AAF27278.1	324	SEAYADGIEGYDILVACSSS	Homo sapiens
2015	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	326	NNILRENQNNQVKKDKKA	Homo sapiens
2016	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	379	DPFLNFSIPVVLFDALT	Homo sapiens
2017	190168	G Protein-Coupled Receptor GPR58	AAF27278.1	380	GKIFSSCFHNTILCMQKE	Homo sapiens
2018	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	327	CPKFVNKILSSHQPLFS	Homo sapiens
2019	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	328	KQHARVISHVPENTKGA	Homo sapiens
2020	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	329	ENTKGAVKKHLSKKDKRKA	Homo sapiens
2021	190170	G Protein-Coupled Receptor GPR57	AAF27279.1	330	CKFHTSFDMMILRLTSI	Homo sapiens
2022	190188	G Protein-Coupled Receptor LGR6	LR36	439	ENHDQDLDLQLEMEDSKP	Homo sapiens
2023	190188	G Protein-Coupled Receptor LGR6	LR36	440	NPHFRDDLRLRPRAGDS	Homo sapiens
2024	190188	G Protein-Coupled Receptor LGR6	LR36	442	EDLHLDDESSKRPLGLLAR	Homo sapiens
2025	190188	G Protein-Coupled Receptor LGR6	LR36	621	DSGPLAYAAAGELEKSSC	Homo sapiens
2026	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1836	CAARRQHALLYNVKRHSLE	Homo sapiens
2027	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1837	DGSLKAKEGSTGTSESSV	Homo sapiens
2028	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1838	CSIDLGEDGMEFGEDDIN	Homo sapiens
2029	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1839	SEDDVEAVNIPESLPPS	Homo sapiens
2030	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1840	MHTIKKKEIQDMLKKFFC	Homo sapiens
2031	190414	G Protein-coupled Receptor GPR101	CAC33098.1	1841	KEDSHDPLPGTEGGTEG	Homo sapiens
2032	190418	Inflammation-Related G Protein-Coupled Receptor	LR8	343	RQVKRAAQALDQYKLRQAS	Homo sapiens

2033	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	344	RTDEAMPGRFQELDSRLASG	Homo sapiens
2034	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	345	DSSEVGDAQINSKRAKQMAEK	Homo sapiens
2035	190418	EX33 Inflammation-Related G Protein-Coupled Receptor	LR8	346	KAQPIKGARRAPDSSEFGK	Homo sapiens
2036	190419	EX33 G Protein-Coupled Receptor Ls190419	CAC33085.1	2716	RRKSNFRLRGYSTGKT	Homo sapiens
2037	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2717	RRQKSSVNYLLALAAAD	Homo sapiens
2038	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2719	CFLTIPYWWWPNIWT	Homo sapiens
2039	190419	G Protein-Coupled Receptor Ls190419	CAC33085.1	2725	CSIFFILNSIIVYKLR	Homo sapiens
2040	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2754	GRUYSLLSFISIPH	Homo sapiens
2041	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2755	FFFLWIHVVDRE	Homo sapiens
2042	190421	MrgX1 G Protein-Coupled Receptor	AAK91804.1	2756	MDPTISTLDTETLP	Homo sapiens
2043	190427	Cysteinyl Leukotriene CYSLT2 Receptor	LR49	471	ASSIMILLDSGSEQNGSVTSC	Homo sapiens
2044	190427	Cysteinyl Leukotriene CYSLT2 Receptor	LR49	472	RVLLKVEVPESGLRVSHRK	Homo sapiens
2045	190427	Cysteinyl Leukotriene CYSLT2 Receptor	LR49	473	KDRLKSALRKGHQKAKTKC	Homo sapiens
2046	190427	Cysteinyl Leukotriene CYSLT2 Receptor	LR49	512	MEPNGTFSNNNSRNC	Homo sapiens
2047	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	2253	CTIENFKREFFPIVYLIF	Homo sapiens
2048	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	2254	GVLGNGLSIYVFLQPYK	Homo sapiens
2049	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	2255	ADYYLRGSNWIFGDLAC	Homo sapiens
2050	190427	Cysteinyl Leukotriene CYSLT2 Receptor	NP_065110.1	2256	FRLHVTISIRSAWILC	Homo sapiens

2051	190427	Receptor	Cysteinyl Leukotriene CYSLT2 NP_065110.1	2257	CGIIWILIMASSIMLLDSGS	Homo sapiens
2052	190427	Receptor	Cysteinyl Leukotriene CYSLT2 NP_065110.1	2258	CLELNLYKIAKLQTMNYIAL	Homo sapiens
2053	190427	Receptor	Cysteinyl Leukotriene CYSLT2 NP_065110.1	2260	VSHRKALTIITIIILIFFLC	Homo sapiens
2054	190427	Receptor	Cysteinyl Leukotriene CYSLT2 NP_065110.1	2261	CFLPYHTLRTVHLTTWKVGL	Homo sapiens
2055	190427	Receptor	Cysteinyl Leukotriene CYSLT2 NP_065110.1	2262	CKDRLHKALVITLALA	Homo sapiens
2056	190427	Receptor	Cysteinyl Leukotriene CYSLT2 NP_065110.1	2263	YFAGENFKDRILKSALRKG	Homo sapiens
2057	190427	Receptor	Cysteinyl Leukotriene CYSLT2 NP_065110.1	2264	HPQKAKTKCVFPVSVWLKE	Homo sapiens
2058	190437	G Protein-Coupled Receptor C5L2	LR31	429	DSVSYEYGDYSDLSDRPVD	Homo sapiens
2059	190437	G Protein-Coupled Receptor C5L2	LR31	430	RESQGGQDESVDKSKTSHD	Homo sapiens
2060	190437	G Protein-Coupled Receptor C5L2	LR31	431	PSAIYRRLHQEHFPARLQC	Homo sapiens
2061	190437	G Protein-Coupled Receptor C5L2	LR31	432	CHWALRESQGGQDESVDKSKS	Homo sapiens
2062	190437	G Protein-Coupled Receptor C5L2	NP_060955.1	2818	MGNDSVSVEYGDYSDLSDRPVD	Homo sapiens
2063	190438	G Protein-Coupled Receptor Ls190438	ENSP00000080322	2585	TERLKIRWHTSDNQVRPQAC	Homo sapiens
2064	190484	G Protein-Coupled Receptor Ls190484	LR33	434	EADLGATGHRPRTELDDED	Homo sapiens
2065	190484	G Protein-Coupled Receptor Ls190484	LR33	435	RTCHRRQQQPAACRGFARVAR	Homo sapiens
2066	190484	G Protein-Coupled Receptor Ls190484	LR33	436	EERPGSFTPEPTQTLDSEG	Homo sapiens
2067	190484	G Protein-Coupled Receptor Ls190484	LR33	437	RSDPTAGPQLNPTAQPQSD	Homo sapiens
2068	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1730	RNVTDIDILALERRLLQ	Homo sapiens
2069	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1731	KKKRMAMARRTIFQKGE	Homo sapiens

2070	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1732	KSVTSASGSENLTUQGE	Homo sapiens
2071	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1733	EVDALFEELSRQLFLETAD	Homo sapiens
2072	190595	G Protein-Coupled Receptor SH120	NP_057418.1	1734	DRVGKTDPTVRGIEIT	Homo sapiens
2073	190599	G Protein-Coupled Receptor GPRC5B	O75205	411	VRLPFIKEKEKSPVGLH	Homo sapiens
2074	190599	G Protein-Coupled Receptor GPRC5B	O75205	412	DEHNAALRTAGFPNGSLGKR	Homo sapiens
2075	190599	G Protein-Coupled Receptor GPRC5B	O75205	413	GKRPSGLGKRPSAPFRSNV	Homo sapiens
2076	190599	G Protein-Coupled Receptor GPRC5B	O75205	414	SQPRMRETAFEEDVQLPR	Homo sapiens
2077	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	542	GDPPIYQSLKAQNAYSRLHC	Homo sapiens
2078	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	543	PFSHSSYTVRSKKIFLSKL	Homo sapiens
2079	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	619	GKILLNLTIGMRKNTCCQN	Homo sapiens
2080	190602	G Protein-Coupled Receptor GPCR150	CAB55314.1	620	EEVTLVQAIRITSVMNE	Homo sapiens
2081	190623	Melanopsin	AAF24978.1	2137	CKNGESLWQRQRLQSE	Homo sapiens
2082	190623	Melanopsin	AAF24978.1	2138	RHSRPYPYSRSTHRST	Homo sapiens
2083	190623	Melanopsin	AAF24978.1	2139	TSHTSNLSWISIRRRQE	Homo sapiens
2084	190623	Melanopsin	AAF24978.1	2140	DLEAKAPRPQGHEAET	Homo sapiens
2085	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1735	KLQRRPVAVDVLLNLTASD	Homo sapiens
2086	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1736	KTRPRLGQAGLVSAC	Homo sapiens
2087	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1737	EFSGDISHSQGTNGTC	Homo sapiens
2088	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1738	SRLVWILGRGGSHRRQRR	Homo sapiens
2089	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1739	GQWQQESSMELKEQKGG	Homo sapiens
2090	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	1740	EEQRADRPAAERTSEHSQGC	Homo sapiens
2091	190627	G Protein-Coupled Receptor GPR41 & GPR42	NP_005295.1	2569	MDTGPDQSYFSGNHWVFSV	Homo sapiens

2092	190701	Receptor GPR41 & GPR42 C-C Chemokine Receptor 11	AAF61299.1	1441	VAIYAYKKQRTKTDV	Homo sapiens
2093	190701	C-C Chemokine Receptor 11	AAF61299.1	1442	VAVTKVPSQSGVGKPCWII	Homo sapiens
2094	190701	C-C Chemokine Receptor 11	AAF61299.1	1443	CNMSKRMDIAIQVTESI	Homo sapiens
2095	190701	C-C Chemokine Receptor 11	AAF61299.1	1444	RQSEVEFFPDSEGPTEP	Homo sapiens
2096	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1741	GHPPGSGGAESADTEARVR	Homo sapiens
2097	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1742	HSVASALKSHRTRGHGRGDC	Homo sapiens
2098	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1743	KGGAAVAGGRPTGASARR	Homo sapiens
2099	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1744	CLVRREFRKALKSLLWR	Homo sapiens
2100	190705	G Protein-Coupled Receptor SALPR	NP_057652.1	1745	RPFTATTKPEHEDQGLQ	Homo sapiens
2101	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	339	AFPPVLDVGTYSHREEDQC	Homo sapiens
2102	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	340	HDRRKMKPVQFVAASQIN	Homo sapiens
2103	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	341	RRRLVLDEFKMEKRISR	Homo sapiens
2104	190711	G Protein-Coupled Receptor GPR85 (SREB2)	CAB82307.1	342	LRRCFSTILLYCRKSRLPRE	Homo sapiens
2105	190725	G Protein-Coupled Receptor GPR26	LR26	554	PLTLAGVVARRQPAGDRIC	Homo sapiens
2106	190725	G Protein-Coupled Receptor GPR26	LR26	555	CSRRPDERLRFVFTGA	Homo sapiens
2107	190725	G Protein-Coupled Receptor GPR26	LR26	557	CKEILNRLHRRSIHSSG	Homo sapiens
2108	190725	G Protein-Coupled Receptor GPR26	LR26	567	CLEEQKRIRRRQRATKKIST	Homo sapiens
2109	190741	Sreb3	LR9	516	EPEEVSGALSPPSASAYVK	Homo sapiens
2110	190741	Sreb3	LR9	519	NGHAASRLLGMDEVKGEK	Homo sapiens
2111	190741	Sreb3	LR9	526	KKCLRTHAPCWGTGGAPAPR	Homo sapiens
2112	190741	Sreb3	LR9	527	VLMAATHAVYVKLLLFYR	Homo sapiens

2113	190742	G Protein-Coupled Receptor H7TBA62	LR23	550	RRAPGPPSDTFVFNALAD	Homo sapiens
2114	190742	G Protein-Coupled Receptor H7TBA62	LR23	551	QRRQRRRQDSRVVARSVR	Homo sapiens
2115	190742	G Protein-Coupled Receptor H7TBA62	LR23	552	RREPRQALAGTRDLRSR	Homo sapiens
2116	190742	G Protein-Coupled Receptor H7TBA62	LR23	553	KQVGRRWVASNPRESRPS	Homo sapiens
2117	190743	G Protein-Coupled Receptor GPRC5D	LR32	568	KDCIESTGDFLLCDAEGP	Homo sapiens
2118	190743	G Protein-Coupled Receptor GPRC5D	LR32	569	VENQELSRGTFLGDSGR	Homo sapiens
2119	190743	G Protein-Coupled Receptor GPRC5D	LR32	570	GDSGSREVLLQEKQEKHA	Homo sapiens
2120	190743	G Protein-Coupled Receptor GPRC5D	LR32	571	SMLLRGNPQFQRQPQWDDP	Homo sapiens
2121	190744	G Protein-Coupled Receptor GPRC5C	LR34	529	KVPSEELTSSSHGPPPTAR	Homo sapiens
2122	190744	G Protein-Coupled Receptor GPRC5C	LR34	532	RGSGEQGGPQGNSSAGWAV	Homo sapiens
2123	190744	G Protein-Coupled Receptor GPRC5C	LR34	535	QDTKKRSLGTVQVFLGT	Homo sapiens
2124	190744	G Protein-Coupled Receptor GPRC5C	LR34	538	KEQKGQSMFVENKAFSMDE	Homo sapiens
2125	190745	G Protein-Coupled Receptor LGR7	LR40	560	TATEIRNQVKKEMILAKR	Homo sapiens
2126	190745	G Protein-Coupled Receptor LGR7	LR40	561	NYRQKRKMSDKGQKTYAPS	Homo sapiens
2127	190745	G Protein-Coupled Receptor LGR7	LR40	565	SCSNLTVLVMRKNKINHLN	Homo sapiens
2128	190745	G Protein-Coupled Receptor LGR7	LR40	566	DELDLGSNKIENLPPUFKD	Homo sapiens
2129	190748	GPCR Ls190748	LR47	546	QLSSPSRPTQKTLCSLR	Homo sapiens
2130	190748	GPCR Ls190748	LR47	547	DMLKIASMHSGQIRKMEHAG	Homo sapiens
2131	190748	GPCR Ls190748	LR47	548	AGGYRSPRTSPDFKALRTVS	Homo sapiens
2132	190748	GPCR Ls190748	LR47	549	RESSCHIVTSSSEFDG	Homo sapiens
2133	190748	GPCR Ls190748	LR47	1481	GVKKVLTSLFLLSARNC	Homo sapiens
2134	190748	GPCR Ls190748	LR47	1482	NSLLNPLIYAYWQKEVRLQ	Homo sapiens
2135	190749	G Protein-Coupled	LR48	467	RRAALRPPRPARGSRURSD	Homo sapiens

2136	190749	Receptor GPR62	LR48	468	RPVRLALGRLRRALPGPVR	Homo sapiens
2137	190749	G Protein-Coupled Receptor GPR62	LR48	510	DSRLSILPLRLRPLGGK	Homo sapiens
2138	190749	G Protein-Coupled Receptor GPR62	LR48	511	RPPEGPAVGPSEAPEQTPE	Homo sapiens
2139	190749	G Protein-Coupled Receptor GPR62	LR48	2702	VVARRAALRPPRPA	Homo sapiens
2140	190749	G Protein-Coupled Receptor GPR62	LR48	2703	PSEAPEQTPELAGGR	Homo sapiens
2141	190749	G Protein-Coupled Receptor GPR62	LR48	2704	GPSEAPEQTPELAG	Homo sapiens
2142	190774	Histamine H4 Receptor	NP_067637.2	2235	PDINSTINLSLSTRVLAFF	Homo sapiens
2143	190774	Histamine H4 Receptor	NP_067637.2	2237	VVDKNLRHRSSYFFLN	Homo sapiens
2144	190774	Histamine H4 Receptor	NP_067637.2	2240	LYPHITLFEWDFGKEIC	Homo sapiens
2145	190774	Histamine H4 Receptor	NP_067637.2	2242	TGHTGVLIKIVILMVAV	Homo sapiens
2146	190774	Histamine H4 Receptor	NP_067637.2	2243	VNGPMILVSESWKDEGSEC	Homo sapiens
2147	190774	Histamine H4 Receptor	NP_067637.2	2244	CEPGFFSEWYLAITSFL	Homo sapiens
2148	190774	Histamine H4 Receptor	NP_067637.2	2245	AYENMNIYWSLWKRDHLSRC	Homo sapiens
2149	190774	Histamine H4 Receptor	NP_067637.2	2246	CGHSFRGRLSRRSL	Homo sapiens
2150	190774	Histamine H4 Receptor	NP_067637.2	2247	IASKMGFSQSDSVLHQRE	Homo sapiens
2151	190774	Histamine H4 Receptor	NP_067637.2	2249	IVLSFYSSATGPKSVWYRIA	Homo sapiens
2152	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2085	IIRVTTPGKTGTAC	Homo sapiens
2153	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2086	SPWTNDPKERINVAVA	Homo sapiens
2154	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2087	RIRELLQGMVYKEIGIAVD	Homo sapiens
2155	190823	Formyl Peptide Receptor 1 (FPR1)	NP_002020.1	2088	TQTSDIATNSTLPSAE	Homo sapiens
2156	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	481	TEVPDSAGTSNTHITSAS	Homo sapiens
2157	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	522	GDTAVERLNVFTIMAKV	Homo sapiens
2158	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	523	MSLAKRVMTGLWIFTI	Homo sapiens
2159	190824	Formyl Peptide Receptor-like 2 (FPR2)	LR14	525	LHFIFGFTVPMSITV	Homo sapiens

2160	190948	like 2 (FPRL2)	NP_038475.1	1658	DELLEAPGDLETLPRLQQHC	Homo sapiens
2161	190948	EMR2 Hormone Receptor	NP_038475.1	1659	CVASHLLDGLIEDVLRGLSKN	Homo sapiens
2162	190948	EMR2 Hormone Receptor	NP_038475.1	1660	KSGDPGPSVVGVLSPG	Homo sapiens
2163	190948	EMR2 Hormone Receptor	NP_038475.1	1661	SKGIRKLKTESEMHILSS	Homo sapiens
2164	190948	EMR2 Hormone Receptor	NP_038475.1	1662	ELSLEVQKQVDRSVTLRQNG	Homo sapiens
2165	190948	EMR2 Hormone Receptor	NP_038475.1	1663	EPEKQMLLHETHGQLLDGS	Homo sapiens
2166	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1492	KRMQKRSVTALMVLNLALAD	Homo sapiens
2167	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1493	RPFVSGKLRTKAMARR	Homo sapiens
2168	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1494	ASYSDIGRRRLQARRFR	Homo sapiens
2169	190955	Leukotriene B4 Receptor BLT1	NP_000743.1	1495	LEGTGSEASSTRRGGG	Homo sapiens
2170	191039	Trace Amine Receptor 1 (TA1)	LR122	2039	RKALKMMLFGKIFQKDSRC	Homo sapiens
2171	191039	Trace Amine Receptor 1 (TA1)	LR122	2040	QIGLEMKNGISQSKERKAV	Homo sapiens
2172	191039	Trace Amine Receptor 1 (TA1)	LR122	2041	RIYUAKEQARLUSDANQK	Homo sapiens
2173	191039	Trace Amine Receptor 1 (TA1)	LR122	2042	ELNFKGAEEIYKHHVC	Homo sapiens
2174	191039	Trace Amine Receptor 1 (TA1)	LR122	2043	CVKNINWSNDVRASLYS	Homo sapiens
2175	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1569	SAEPPADWDGAGGSYRLRG	Homo sapiens
2176	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1571	GIVRRVRVSVKRVSVLN	Homo sapiens
2177	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1572	RNEEFRRSVRSVLPGVGDA	Homo sapiens
2178	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1573	CEEEESWAGRRIPVSLLYSG	Homo sapiens
2179	191132	G Protein-Coupled Receptor 88 (GPR88)	NP_071332.1	1651	CYLGIVRRVRVSVKRVSV	Homo sapiens
2180	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1544	KELYRSYVTRGVGVKVP	Homo sapiens
2181	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1545	ILTNRQPRDKNVKKCS	Homo sapiens

2182	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1546	CPNSATSLSQDNRIKKEQDGG	Homo sapiens
2183	191168	P2Y12 Platelet ADP Receptor	NP_073625.1	1570	TTRPFKTSNPKNLLGAK	Homo sapiens
2184	191193	Trace Amine Receptor 3 (TA3)	LR88	1969	ANEEGIEELVVA	Homo sapiens
2185	191193	Trace Amine Receptor 3 (TA3)	LR88	2316	RKIESTASQAQSS	Homo sapiens
2186	191193	Trace Amine Receptor 3 (TA3)	LR88	2571	LVDAVIDAYMNF	Homo sapiens
2187	191193	Trace Amine Receptor 3 (TA3)	LR88	2573	RTDSSITNLFSEEVET	Homo sapiens
2188	191196	G Protein-Coupled Receptor GPR80	IP_13092	1864	NASDFPDYAAAFGNCTDE	Homo sapiens
2189	191196	G Protein-Coupled Receptor GPR80	IP_13092	1865	TLTITNTRNRSACLD	Homo sapiens
2190	191196	G Protein-Coupled Receptor GPR80	IP_13092	1866	TLIHGLQTDCLKQKARR	Homo sapiens
2191	191196	G Protein-Coupled Receptor GPR80	IP_13092	1867	RLLSISCSIQIHEA	Homo sapiens
2192	191196	G Protein-Coupled Receptor GPR80	IP_13092	1868	QQAVCSTVRCKVSGNLE	Homo sapiens
2193	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2749	QDIAEVDHSEGCF	Homo sapiens
2194	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2750	RKQWRLQQPILKLA	Homo sapiens
2195	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2751	CSISINFPSFTTVMTC	Homo sapiens
2196	191218	MrgX2 G Protein-Coupled Receptor	AAK91805.1	2752	QWFLILWIWKDSV	Homo sapiens
2197	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2575	AFLSDNTIEVRINRLKK	Homo sapiens
2198	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2576	QETKNEFRNLKQIQSKC	Homo sapiens
2199	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2577	CNNKTHWAPVRSTM	Homo sapiens
2200	191222	G Protein-Coupled Receptor Ls191222	ENSP00000199719	2581	TKMAEYDLQNDVFIIPD	Homo sapiens
2201	193511	EGF-Like Module-Containing	AAK15076.1	1665	CQDITSSKTEGRKELQKIV	Homo sapiens

2202	193511	Mucin-Like Receptor EMR3	EGF-Like Module-Containing	AAK15076.1	1666	RDVESKVLKTDPEQK	Homo sapiens
2203	193511	Mucin-Like Receptor EMR3	EGF-Like Module-Containing	AAK15076.1	1667	KIQNDSVAIETQAITDNC	Homo sapiens
2204	193511	Mucin-Like Receptor EMR3	EGF-Like Module-Containing	AAK15076.1	1668	CSEERKTFNLNVQMNSMDIR	Homo sapiens
2205	193511	Mucin-Like Receptor EMR3	EGF-Like Module-Containing	AAK15076.1	1669	EEMDKKDQVYVNSQVVSAA	Homo sapiens
2206	193511	Mucin-Like Receptor EMR3	EGF-Like Module-Containing	AAK15076.1	1670	SKSVTLTFQHVKMTPTSK	Homo sapiens
2207	193516	Mucin-Like Receptor EMR3	G Protein-Coupled	CAC21687.1	2142	CLLLPTAVIVFSYVKIIAK	Homo sapiens
2208	193516	Receptor dJ402H5.1	G Protein-Coupled	CAC21687.1	2144	RPDSPIQLSWPTLLA	Homo sapiens
2209	193516	Receptor dJ402H5.1	G Protein-Coupled	CAC21687.1	2145	CQTGGLKATKKKSLEG	Homo sapiens
2210	193516	Receptor dJ402H5.1	G Protein-Coupled	CAC21687.1	2146	RLHTVTIVRKSSAVLE	Homo sapiens
2211	193516	Receptor dJ402H5.1	G Protein-Coupled	CAC21687.1	2620	PTAVIVFSYVKIIAKV	Homo sapiens
2212	193524	Receptor dJ402H5.1	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	1947	KLAQRLREVTGHTDHYFSQD	Homo sapiens
2213	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	1948	CALQTWGSERLGLDTSKD	Homo sapiens
2214	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2734	RGRRQSARNSRGPPEQNE	Homo sapiens
2215	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2735	RNSRGPPEQNEELG	Homo sapiens
2216	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2736	AQVREDVRPHTVVLR	Homo sapiens
2217	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2742	QLDQVPSRHPSPRE	Homo sapiens

2218	193524	Cadherin EGF LAG Seven-Pass G-Type Receptor 3 (CELSR3)	NP_001398.1	2744	LDLSRSSNSREQLDQV	Homo sapiens
2219	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1903	REEHFMVDARNRSYPLYSC	Homo sapiens
2220	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1904	PGPAPGGEEAADPRASRR	Homo sapiens
2221	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1905	CPRPSGSHKEAYSERPGGLL	Homo sapiens
2222	193914	Neuropeptide FF 1 Receptor	NP_071429.1	1906	PSSGAPRPGRPLRNGRVA	Homo sapiens
2223	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2018	FLGNDDIKTKKELIVN	Homo sapiens
2224	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2019	QVTYRDSKEKRDLRNFLK	Homo sapiens
2225	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2020	CERTKIWGTFKINERFTND	Homo sapiens
2226	194319	G Protein-Coupled Receptor FLJ22684	NP_079324.1	2021	SKYANGIEIQLKKAYER	Homo sapiens
2227	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2022	CIVWFIVRTSLHAP	Homo sapiens
2228	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2023	KILALFWFDSREISFEAC	Homo sapiens
2229	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2024	CVHQDVMKLAYADTLP	Homo sapiens
2230	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2027	RFGNSLHPIVRVVMGD	Homo sapiens
2231	194431	Olfactory Receptor, Family 51, Subfamily E, Member 2	NP_110401.1	2028	KTKQIRTRVLAMFKISC	Homo sapiens
2232	194743	FLJ14454	LR77	1855	KTDENEQDQSASVDMVFSP	Homo sapiens
2233	194743	FLJ14454	LR77	1856	KKDYQYPKSLDILSNVGC	Homo sapiens
2234	194743	FLJ14454	LR77	1857	KNLQTSDDGDIINIDFNN	Homo sapiens
2235	194743	FLJ14454	LR77	1858	SGNGNPNQWELDYRQEKIC	Homo sapiens
2236	194743	FLJ14454	LR77	1859	RPRLRVKMYNFLRSPLTHE	Homo sapiens
2237	194745	G Protein-Coupled Receptor SLI/MCH2	AAK32193.1	1845	CNPSVPKQRVMKLTIM	Homo sapiens
2238	194745	G Protein-Coupled Receptor SLI/MCH2	AAK32193.1	1846	RLTRWRTRYKTIRINLG	Homo sapiens
2239	194745	G Protein-Coupled Receptor SLI/MCH2	AAK32193.1	1847	KDGVESCAFDLTSPDDVL	Homo sapiens
2240	194745	G Protein-Coupled Receptor SLI/MCH2	AAK32193.1	1848	LSGNFQKRLPQIQRRATE	Homo sapiens

2241	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1849	TIIRSRKKTVPDIYIC	Homo sapiens
2242	194745	G Protein-Coupled Receptor SLT/MCH2	AAK32193.1	1907	RRATEKEINNMGNTLKSHF	Homo sapiens
2243	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2089	CRIEGDTISQVMPPLLIVA	Homo sapiens
2244	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2090	RRHWAFGDIPCRVGLFTL	Homo sapiens
2245	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2091	CESFIMESANGWHDIM	Homo sapiens
2246	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2092	CSFKIVWSLRRRQQLARQAR	Homo sapiens
2247	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2093	RRRQQLARQARMKKATR	Homo sapiens
2248	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2094	TVSSACDPSVHGALH	Homo sapiens
2249	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2095	CSLKPQPGHSGTKQRPEEM	Homo sapiens
2250	194756	Chemokine Receptor FKSG80/GPR81	AAK29071.1	2096	CISVANSFQSGSDGQWD	Homo sapiens
2251	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2034	RTRKQHSEATNSSNRVFC	Homo sapiens
2252	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2035	RVISQISADNYKIHGDPSA	Homo sapiens
2253	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2036	TSSARTSNAKPFHSD	Homo sapiens
2254	194757	G Protein-Coupled Receptor Ls194757	CAB82385.1	2037	NGTRPGMASTKLSPWD	Homo sapiens
2255	194858	G Protein-Coupled Receptor Ls194858	LR84	1933	LGIAWDRRLRSPAGC	Homo sapiens
2256	194858	G Protein-Coupled Receptor Ls194858	LR84	1934	GERYMAVLRPLQPPGS	Homo sapiens
2257	194858	G Protein-Coupled Receptor Ls194858	LR84	1935	CRDEPSALARALTWRQAR	Homo sapiens
2258	194858	G Protein-Coupled Receptor Ls194858	LR84	1936	AAQRCLQGLWGRASRD	Homo sapiens
2259	194858	G Protein-Coupled Receptor Ls194858	LR84	1937	RDSPGPSIAYHPSSQSSVD	Homo sapiens
2260	194878	MigX3 G Protein-Coupled	AAK91806.1	2748	ALFSRIHLDWKVLF	Homo sapiens

2261	194903	Receptor	ENSP00000198236	1991	CIAFKDIMPFSQVGVDER	Homo sapiens
2262	194903	G Protein-Coupled Receptor GPCR83	ENSP00000198236	1992	KAFEEAYARADKKAPRPC	Homo sapiens
2263	194903	G Protein-Coupled Receptor GPCR83	ENSP00000198236	1993	ETKIQWHGKDNQVPKSVCS	Homo sapiens
2264	194903	G Protein-Coupled Receptor GPCR83	ENSP00000198236	1994	CSYLGKDLPENVNEAK	Homo sapiens
2265	194904	WO0034334-hFB41A	LR114	2011	SDYDMPLEDEDEDVINS	Homo sapiens
2266	194904	WO0034334-hFB41A	LR114	2014	NPHGAHATSPFNFSY	Homo sapiens
2267	194905	G Protein-Coupled Receptor MGC7035	LR112	1986	ERALPRTYMASVYNTRHVC	Homo sapiens
2268	194905	G Protein-Coupled Receptor MGC7035	LR112	1987	CAKMQNAEAAADATLVF	Homo sapiens
2269	194905	G Protein-Coupled Receptor MGC7035	LR112	1988	DRDTGRLEPSAHLRLVATVC	Homo sapiens
2270	194905	G Protein-Coupled Receptor MGC7035	LR112	1989	RYMNGSFPSKLQRLMKKLPC	Homo sapiens
2271	194907	G Protein-Coupled Receptor 14273	LR116	2003	CARAAGDAPLSLEQANRTR	Homo sapiens
2272	194907	G Protein-Coupled Receptor 14273	LR116	2004	VISYSKILQITKASRKRL	Homo sapiens
2273	194907	G Protein-Coupled Receptor 14273	LR116	2005	TVSLAYSRSHQIRVSQQD	Homo sapiens
2274	194907	G Protein-Coupled Receptor 14273	LR116	2006	CTWFPEKGAILDTSVKRND	Homo sapiens
2275	194908	G Protein-coupled Receptor Gpcrb4	LR117	2007	TYGRDNGQLLGERVARRDIC	Homo sapiens
2276	194908	G Protein-coupled Receptor Gpcrb4	LR117	2008	QETLPTLQPNQNMTEERQR	Homo sapiens
2277	194908	G Protein-coupled Receptor Gpcrb4	LR117	2009	RTSQSYTCNQECDNCLNAT	Homo sapiens
2278	194908	G Protein-coupled Receptor Gpcrb4	LR117	2010	RPQSHPRTPDDPKIIVSC	Homo sapiens
2279	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2312	VARRQAKKIENTGSKT	Homo sapiens
2280	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2313	KVITGQVLKNSSA	Homo sapiens

2281	194957	Trace Amine Receptor 4 (TA4)	AAK71243.1	2318	MSSNSSLLVAVQLC	Homo sapiens
2282	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2307	IAKQQAIIETSSKV	Homo sapiens
2283	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2314	MTSNFSQPVVQLC	Homo sapiens
2284	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2319	KULSGDVLKAS	Homo sapiens
2285	194958	Trace Amine Receptor 5 (TA5)	AAK71244.1	2570	SGDVLKASSSTISLFLE	Homo sapiens
2286	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2727	QDKPEVDKGGGQLPEESL	Homo sapiens
2287	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2728	LNISHLRKILVS	Homo sapiens
2288	194989	MrgX4 G Protein-Coupled Receptor	AAK91807.1	2729	MDPTVPVFGTKL	Homo sapiens
2289	195015	G Protein-Coupled Receptor GPR82	AAL26482	2706	RYATLMQKDSQETT	Homo sapiens
2290	195015	G Protein-Coupled Receptor GPR82	AAL26482	2707	KIFYGHLLKKFRQPNF	Homo sapiens
2291	195015	G Protein-Coupled Receptor GPR82	AAL26482	2708	YSVIEATEGEESLC	Homo sapiens
2292	195015	G Protein-Coupled Receptor GPR82	AAL26482	2715	CTSIMKDLTYSSVKR	Homo sapiens

SEQ ID NO:	LS_ID	Gene	Antibody Company Name
1	127	5-HT1A Receptor	Chemicon
1	127	5-HT1A Receptor	Research Diagnostics
1	127	5-HT1A Receptor	Santa Cruz
3	128	5-HT1B Receptor	Chemicon
3	128	5-HT1B Receptor	Research Diagnostics
3	128	5-HT1B Receptor	Santa Cruz
5	129	5-HT1D Receptor	Research Diagnostics
5	129	5-HT1D Receptor	Santa Cruz
11	132	5-HT2A Receptor	Calbiochem
11	132	5-HT2A Receptor	Research Diagnostics
13	133	5-HT2B Receptor	Research Diagnostics
15	134	5-HT2C Receptor	Research Diagnostics
15	134	5-HT2C Receptor	Santa Cruz
21	139	5-HT7 Receptor	Calbiochem
23	272	Adenosine A1 Receptor	Alpha Diagnostic Int.
23	272	Adenosine A1 Receptor	Calbiochem
23	272	Adenosine A1 Receptor	Santa Cruz
25	273	Adenosine A2a Receptor	Alpha Diagnostic Int.
25	273	Adenosine A2a Receptor	Calbiochem
25	273	Adenosine A2a Receptor	Chemicon
25	273	Adenosine A2a Receptor	Santa Cruz
27	274	Adenosine A2b Receptor	Alpha Diagnostic Int.
27	274	Adenosine A2b Receptor	Chemicon
27	274	Adenosine A2b Receptor	Santa Cruz
29	275	Adenosine A3 Receptor	Alpha Diagnostic Int.
29	275	Adenosine A3 Receptor	Santa Cruz
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Alpha Diagnostic Int.
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Chemicon
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Research Diagnostics
31	309	Melanocortin 2 Receptor (adrenocorticotrophic hormone) (MC2R)	Santa Cruz
35	377	Alpha 1b-adrenoceptor	Research Diagnostics
35	377	Alpha 1b-adrenoceptor	Santa Cruz
37	379	Alpha 1c-adrenoceptor	Research Diagnostics
37	379	Alpha 1c-adrenoceptor	Santa Cruz
39	387	Alpha 2a-adrenoceptor	Calbiochem
39	387	Alpha 2a-adrenoceptor	Santa Cruz
41	388	Alpha 2b-adrenoceptor	Research Diagnostics
41	388	Alpha 2b-adrenoceptor	Santa Cruz
43	389	Alpha 2c-adrenoceptor	Research Diagnostics
43	389	Alpha 2c-adrenoceptor	Santa Cruz
45	599	Bradykinin B1 Receptor	Research Diagnostics
49	635	Beta-1 adrenoceptor	Calbiochem
49	635	Beta-1 adrenoceptor	Research Diagnostics

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49	635	Beta-1 adrenoceptor	Santa Cruz
51	640	Beta-2 adrenoceptor	Research Diagnostics
51	640	Beta-2 adrenoceptor	Santa Cruz
53	643	Beta-3 adrenoceptor	Alpha Diagnostic Int.
53	643	Beta-3 adrenoceptor	Chemicon
53	643	Beta-3 adrenoceptor	Research Diagnostics
53	643	Beta-3 adrenoceptor	Santa Cruz
57	692	Bombesin Receptor Subtype-3	Alpha Diagnostic Int.
57	692	Bombesin Receptor Subtype-3	Chemicon
59	729	CXC Chemokine Receptor 5	Research Diagnostics
59	729	CXC Chemokine Receptor 5	Santa Cruz
61	735	C-C Chemokine Receptor 1	Calbiochem
61	735	C-C Chemokine Receptor 1	Capralogics
61	735	C-C Chemokine Receptor 1	Chemicon
61	735	C-C Chemokine Receptor 1	Research Diagnostics
61	735	C-C Chemokine Receptor 1	Santa Cruz
63	737	C-C Chemokine Receptor 3	Research Diagnostics
63	737	C-C Chemokine Receptor 3	Santa Cruz
65	738	C-C Chemokine Receptor 4	Capralogics
65	738	C-C Chemokine Receptor 4	Research Diagnostics
65	738	C-C Chemokine Receptor 4	Santa Cruz
67	741	C-C Chemokine Receptor 7	Research Diagnostics
67	741	C-C Chemokine Receptor 7	Santa Cruz
69	742	C-C Chemokine Receptor 8	Chemicon
70	742	C-C Chemokine Receptor 8	Chemicon
71	742	C-C Chemokine Receptor 8	Chemicon
73	752	CXC Chemokine Receptor 3	Research Diagnostics
73	752	CXC Chemokine Receptor 3	Santa Cruz
73	752	CXC Chemokine Receptor 3	Zymed
75	753	CXC Chemokine Receptor 4	Biosource
75	753	CXC Chemokine Receptor 4	Calbiochem
75	753	CXC Chemokine Receptor 4	Capralogics
75	753	CXC Chemokine Receptor 4	Chemicon
75	753	CXC Chemokine Receptor 4	eBioscience
75	753	CXC Chemokine Receptor 4	Research Diagnostics
75	753	CXC Chemokine Receptor 4	Santa Cruz
77	755	Complement Component 3a Receptor 1	Chemokine.com
79	758	Complement Component 5a Receptor 1	Santa Cruz
83	832	Cannabinoid Receptor 1	Alpha Diagnostic Int.
83	832	Cannabinoid Receptor 1	Biosource
83	832	Cannabinoid Receptor 1	Calbiochem
83	832	Cannabinoid Receptor 1	Cayman
83	832	Cannabinoid Receptor 1	Chemicon
83	832	Cannabinoid Receptor 1	Santa Cruz
85	833	Cannabinoid Receptor 2	Alpha Diagnostic Int.
85	833	Cannabinoid Receptor 2	Calbiochem
85	833	Cannabinoid Receptor 2	Cayman
85	833	Cannabinoid Receptor 2	Chemicon
85	833	Cannabinoid Receptor 2	Santa Cruz
97	1240	Dopamine Receptor D1	Alpha Diagnostic Int.
97	1240	Dopamine Receptor D1	Biogenesis

97	1240	Dopamine Receptor D1	Calbiochem
97	1240	Dopamine Receptor D1	Chemicon
97	1240	Dopamine Receptor D1	FabGennix through Abcam
97	1240	Dopamine Receptor D1	Research Diagnostics
97	1240	Dopamine Receptor D1	Santa Cruz
99	1241	Dopamine Receptor D5	Alpha Diagnostic Int.
99	1241	Dopamine Receptor D5	Biogenesis
99	1241	Dopamine Receptor D5	Calbiochem
99	1241	Dopamine Receptor D5	Chemicon
99	1241	Dopamine Receptor D5	Santa Cruz
101	1242	Dopamine Receptor D2	Alpha Diagnostic Int.
101	1242	Dopamine Receptor D2	Biogenesis
101	1242	Dopamine Receptor D2	Calbiochem
101	1242	Dopamine Receptor D2	Chemicon
101	1242	Dopamine Receptor D2	DPC Biermann/Acris
101	1242	Dopamine Receptor D2	FabGennix through Abcam
101	1242	Dopamine Receptor D2	Research Diagnostics
101	1242	Dopamine Receptor D2	Santa Cruz
103	1243	Dopamine Receptor D3	Alpha Diagnostic Int.
103	1243	Dopamine Receptor D3	Biogenesis
103	1243	Dopamine Receptor D3	Calbiochem
103	1243	Dopamine Receptor D3	Chemicon
103	1243	Dopamine Receptor D3	Research Diagnostics
103	1243	Dopamine Receptor D3	Santa Cruz
103	1243	Dopamine Receptor D3	Zymed
105	1244	Dopamine Receptor D4	Alpha Diagnostic Int.
105	1244	Dopamine Receptor D4	Biogenesis
105	1244	Dopamine Receptor D4	Calbiochem
105	1244	Dopamine Receptor D4	Chemicon
105	1244	Dopamine Receptor D4	DPC Biermann/Acris
105	1244	Dopamine Receptor D4	Santa Cruz
107	1267	Opioid Receptor, delta 1 (OPRD1)	Biosource
107	1267	Opioid Receptor, delta 1 (OPRD1)	Calbiochem
107	1267	Opioid Receptor, delta 1 (OPRD1)	DPC Biermann/Acris
107	1267	Opioid Receptor, delta 1 (OPRD1)	Santa Cruz
113	1486	Endothelin B Receptor	Biogenesis
113	1486	Endothelin B Receptor	Capralogics
113	1486	Endothelin B Receptor	DPC Biermann/Acris
113	1486	Endothelin B Receptor	Fitzgerald Industries Int.
113	1486	Endothelin B Receptor	Research Diagnostics
115	1488	Endothelin A Receptor	Biogenesis
115	1488	Endothelin A Receptor	Capralogics
115	1488	Endothelin A Receptor	DPC Biermann/Acris
115	1488	Endothelin A Receptor	Fitzgerald Industries Int.
115	1488	Endothelin A Receptor	Research Diagnostics
117	1598	Calcium-Sensing Receptor (CASR)	Chemicon
117	1598	Calcium-Sensing Receptor (CASR)	DPC Biermann/Acris

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121	1681	Follicle Stimulating Hormone Receptor	Biogenesis
121	1681	Follicle Stimulating Hormone Receptor	DPC Biermann/Acris
121	1681	Follicle Stimulating Hormone Receptor	Santa Cruz
125	1762	Galanin Receptor GalR1	Alpha Diagnostic Int.
135	1925	Gonadotropin-Releasing Hormone Receptor	Biocarta
135	1925	Gonadotropin-Releasing Hormone Receptor	Lab Vision Corporation/NeoMarkers
135	1925	Gonadotropin-Releasing Hormone Receptor	Research Diagnostics
135	1925	Gonadotropin-Releasing Hormone Receptor	Santa Cruz
139	1951	Growth Hormone Secretagogue Receptor	Santa Cruz
143	2120	Histamine H1 Receptor	Alpha Diagnostic Int.
143	2120	Histamine H1 Receptor	Chemicon
145	2121	Histamine H2 Receptor	Alpha Diagnostic Int.
145	2121	Histamine H2 Receptor	Chemicon
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Biosource
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Calbiochem
147	2783	Opioid Receptor, kappa 1 (OPRK1)	DPC Biermann/Acris
147	2783	Opioid Receptor, kappa 1 (OPRK1)	Santa Cruz
151	2976	Lysophosphatidic Acid Receptor Edg2	Exalpha Biologicals
155	3057	Melanocortin 3 Receptor (MC3R)	Alpha Diagnostic Int.
155	3057	Melanocortin 3 Receptor (MC3R)	Chemicon
155	3057	Melanocortin 3 Receptor (MC3R)	Research Diagnostics
155	3057	Melanocortin 3 Receptor (MC3R)	Santa Cruz
157	3058	Melanocortin 4 Receptor (MC4R)	Alpha Diagnostic Int.
157	3058	Melanocortin 4 Receptor (MC4R)	Chemicon
157	3058	Melanocortin 4 Receptor (MC4R)	Research Diagnostics
157	3058	Melanocortin 4 Receptor (MC4R)	Santa Cruz
159	3059	Melanocortin 5 Receptor (MC5R)	Alpha Diagnostic Int.
159	3059	Melanocortin 5 Receptor (MC5R)	Chemicon
159	3059	Melanocortin 5 Receptor (MC5R)	Research Diagnostics

159	3059	Melanocortin 5 Receptor (MC5R)	Santa Cruz
161	3061	Melanocortin 1 Receptor (MC1R)	Alpha Diagnostic Int.
161	3061	Melanocortin 1 Receptor (MC1R)	Chemicon
161	3061	Melanocortin 1 Receptor (MC1R)	Research Diagnostics
161	3061	Melanocortin 1 Receptor (MC1R)	Santa Cruz
169	3093	Metabotropic Glutamate Receptor 1	Chemicon
171	3094	Metabotropic Glutamate Receptor 2	Chemicon
173	3095	Metabotropic Glutamate Receptor 3	Chemicon
175	3096	Metabotropic Glutamate Receptor 4	Zymed
177	3097	Metabotropic Glutamate Receptor 5	Chemicon
183	3100	Metabotropic Glutamate Receptor 8	Chemicon
185	3212	Opioid mu-type Receptor	Biosource
185	3212	Opioid mu-type Receptor	Calbiochem
185	3212	Opioid mu-type Receptor	Chemicon
185	3212	Opioid mu-type Receptor	DPC Biermann/Acris
185	3212	Opioid mu-type Receptor	Santa Cruz
187	3223	Muscarinic acetylcholine Receptor M1	Biogenesis
187	3223	Muscarinic acetylcholine Receptor M1	Calbiochem
187	3223	Muscarinic acetylcholine Receptor M1	Chemicon
187	3223	Muscarinic acetylcholine Receptor M1	Santa Cruz
189	3224	Muscarinic acetylcholine Receptor M2	Biogenesis
189	3224	Muscarinic acetylcholine Receptor M2	Calbiochem
189	3224	Muscarinic acetylcholine Receptor M2	Chemicon
189	3224	Muscarinic acetylcholine Receptor M2	Santa Cruz
191	3226	Muscarinic acetylcholine Receptor M4	Biogenesis
192	3226	Muscarinic acetylcholine Receptor M4	Biogenesis
191	3226	Muscarinic acetylcholine Receptor M4	Chemicon
192	3226	Muscarinic acetylcholine Receptor M4	Chemicon
191	3226	Muscarinic acetylcholine Receptor M4	Santa Cruz

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192	3226	Muscarinic acetylcholine Receptor M4	Santa Cruz
194	3227	Muscarinic Acetylcholine Receptor M5	Biogenesis
194	3227	Muscarinic Acetylcholine Receptor M5	Santa Cruz
200	3404	Neuropeptide Y Receptor Type 2	Biogenesis
202	3405	Neuropeptide Y Receptor Type 4	Biogenesis
206	3408	Neurotensin Receptor Type 1	Santa Cruz
208	3452	Opiate Receptor-Like 1 (OPRL1)	Santa Cruz
214	3582	Oxytocin Receptor	Santa Cruz
216	3589	Purinergic Receptor P2Y, G-protein coupled, 2 (P2RY2)	Chemicon
216	3589	Purinergic Receptor P2Y, G-protein coupled, 2 (P2RY2)	Zymed
218	3595	Purinergic Receptor P2Y1	Chemicon
218	3595	Purinergic Receptor P2Y1	Zymed
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Biocarta
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Lab Vision Corporation/NeoMarkers
228	3640	Parathyroid Hormone Receptor 1 (PTHr1)	Santa Cruz
236	3846	Sphingolipid Receptor Edg1	Exalpa Biologicals
238	3847	Sphingolipid Receptor Edg3	Exalpa Biologicals
240	3848	C-C Chemokine Receptor 9	Research Diagnostics
248	3852	CX3C Chemokine Fractalkine Receptor 1	Chemicon
248	3852	CX3C Chemokine Fractalkine Receptor 1	Chemokine.com
248	3852	CX3C Chemokine Fractalkine Receptor 1	eBioscience
250	3853	G Protein-Coupled Receptor GPR15	Santa Cruz
264	3860	G Protein-Coupled Receptor SLC/MCH1	Alpha Diagnostic Int.
264	3860	G Protein-Coupled Receptor SLC/MCH1	Santa Cruz
295	3927	Prostaglandin E Receptor EP4	Cayman
299	4051	Proteinase-Activated Receptor 2	Research Diagnostics
299	4051	Proteinase-Activated Receptor 2	Santa Cruz
301	4052	Proteinase-Activated Receptor 3	Research Diagnostics
301	4052	Proteinase-Activated Receptor 3	Santa Cruz
305	4254	Rhodopsin	Biocarta
305	4254	Rhodopsin	DPC Biermann/Acris
311	4480	Somatostatin Receptor Type 1	Santa Cruz

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313	4481	Somatostatin Receptor Type 2	Biogenesis
313	4481	Somatostatin Receptor Type 2	Santa Cruz
315	4482	Somatostatin Receptor Type 3	Santa Cruz
317	4483	Somatostatin Receptor Type 4	Santa Cruz
319	4484	Somatostatin Receptor Type 5	Santa Cruz
321	4552	Tachykinin Receptor 1	Santa Cruz
323	4687	Thrombin Receptor	DPC Biermann/Acris
323	4687	Thrombin Receptor	Research Diagnostics
323	4687	Thrombin Receptor	Santa Cruz
325	4734	Thyrotropin Releasing Hormone Receptor	Santa Cruz
327	4944	Angiotensin II Type 1 Receptor	Alpha Diagnostic Int.
327	4944	Angiotensin II Type 1 Receptor	Biocarta
327	4944	Angiotensin II Type 1 Receptor	Biogenesis
327	4944	Angiotensin II Type 1 Receptor	Capralogics
327	4944	Angiotensin II Type 1 Receptor	Chemicon
327	4944	Angiotensin II Type 1 Receptor	DPC Biermann/Acris
327	4944	Angiotensin II Type 1 Receptor	Fitzgerald Industries Int.
327	4944	Angiotensin II Type 1 Receptor	Fitzgerald Industries Int.
327	4944	Angiotensin II Type 1 Receptor	Lab Vision Corporation/NeoMarkers
327	4944	Angiotensin II Type 1 Receptor	Santa Cruz
329	4946	Angiotensin II Type 2 Receptor	Alpha Diagnostic Int.
329	4946	Angiotensin II Type 2 Receptor	DPC Biermann/Acris
329	4946	Angiotensin II Type 2 Receptor	Santa Cruz
331	5072	Pyrimidinergic Receptor P2Y4	Chemicon
333	5117	Vasopressin V1A Receptor	Chemicon
335	5118	Vasopressin V1B Receptor	Alpha Diagnostic Int.
335	5118	Vasopressin V1B Receptor	Chemicon
337	5119	Vasopressin V2 Receptor	Alpha Diagnostic Int.
337	5119	Vasopressin V2 Receptor	Chemicon
337	5119	Vasopressin V2 Receptor	Research Diagnostics
347	6031	SIV/HIV Receptor BONZO	Santa Cruz
349	6204	Lysophosphatidic Acid Receptor Edg4	Exalpha Biologicals
351	6213	C-C Chemokine Receptor 5	Calbiochem
351	6213	C-C Chemokine Receptor 5	Capralogics
351	6213	C-C Chemokine Receptor 5	Chemicon
351	6213	C-C Chemokine Receptor 5	Research Diagnostics
351	6213	C-C Chemokine Receptor 5	Santa Cruz
361	6853	Purinergic Receptor P2Y11	Zymed

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365	7221	Galanin Receptor GalR2	Alpha Diagnostic Int.
367	7246	Orexin Receptor 1	Alpha Diagnostic Int.
369	7247	Orexin Receptor 2	Alpha Diagnostic Int.
371	8436	Platelet-Activating Factor Receptor	Cayman
371	8436	Platelet-Activating Factor Receptor	Santa Cruz
377	9421	Neuropeptide Y Receptor Type 1	Biogenesis
377	9421	Neuropeptide Y Receptor Type 1	DPC Biermann/Acris
379	9834	Corticotropin releasing factor Receptor 1	Research Diagnostics
379	9834	Corticotropin releasing factor Receptor 1	Santa Cruz
385	14198	Interleukin-8 Receptor B	Biosource
385	14198	Interleukin-8 Receptor B	R&D Systems
385	14198	Interleukin-8 Receptor B	Research Diagnostics
385	14198	Interleukin-8 Receptor B	Santa Cruz
387	14641	Calcitonin Receptor	Santa Cruz
389	16041	C-C Chemokine Receptor 6	Research Diagnostics
389	16041	C-C Chemokine Receptor 6	Santa Cruz
391	16599	Smoothened	Research Diagnostics
391	16599	Smoothened	Santa Cruz
397	17535	Gaba(b) Receptor 1	Alpha Diagnostic Int.
397	17535	Gaba(b) Receptor 1	Calbiochem
397	17535	Gaba(b) Receptor 1	Chemicon
397	17535	Gaba(b) Receptor 1	Santa Cruz
423	37498	Xenotropic and Polytropic Retrovirus Receptor (XPR1)	Santa Cruz
435	54053	Gaba(b) Receptor 2	Alpha Diagnostic Int.
435	54053	Gaba(b) Receptor 2	Chemicon
439	56923	Muscarinic acetylcholine Receptor M3	Biogenesis
439	56923	Muscarinic acetylcholine Receptor M3	Santa Cruz
457	152201	Thyrotropin Receptor	DPC Biermann/Acris
457	152201	Thyrotropin Receptor	Santa Cruz
459	152245	C-C Chemokine Receptor 2	Research Diagnostics
459	152245	C-C Chemokine Receptor 2	Santa Cruz
461	152299	Interleukin-8 Receptor A	Biosource
462	152299	Interleukin-8 Receptor A	Biosource
461	152299	Interleukin-8 Receptor A	R&D Systems
462	152299	Interleukin-8 Receptor A	R&D Systems
461	152299	Interleukin-8 Receptor A	Research Diagnostics
462	152299	Interleukin-8 Receptor A	Research Diagnostics
461	152299	Interleukin-8 Receptor A	Santa Cruz
462	152299	Interleukin-8 Receptor A	Santa Cruz
468	159973	Vasoactive Intestinal Polypeptide Receptor 1	Exalpha Biologicals
470	160040	Vasoactive Intestinal Polypeptide Receptor 2	Exalpha Biologicals
472	160055	Motilin Receptor (GPR38)	Santa Cruz

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503	160228	T-Cell Death-Associated Gene 8 (GPR65)	Santa Cruz
507	160312	Sphingolipid Receptor Edg5	Exalpha Biologicals
515	160329	Proteinase-Activated Receptor 4	Santa Cruz
535	161214	Galanin Receptor GalR3	Alpha Diagnostic Int.
537	161221	Urotensin-II Receptor (GPR14)	Santa Cruz
546	177168	Cysteinyl Leukotriene CYSLT1 Receptor	Cayman
548	177191	Histamine H3 Receptor	Alpha Diagnostic Int.
548	177191	Histamine H3 Receptor	Chemicon
552	180956	Lysophosphatidic Acid Receptor Edg7	Exalpha Biologicals
562	189900	Sphingolipid Receptor Edg8	Exalpha Biologicals
628	190774	Histamine H4 Receptor	Alpha Diagnostic Int.
628	190774	Histamine H4 Receptor	Chemicon
636	190955	Leukotriene B4 Receptor BLT1	Cayman

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(54) Title: ANTIGENIC PEPTIDES, SUCH AS FOR G PROTEIN-COUPLED RECEPTORS (GPCRS), ANTIBODIES THERETO, AND SYSTEMS FOR IDENTIFYING SUCH ANTIGENIC PEPTIDES

(57) Abstract: The present invention provides antigenic peptides for GPCRs and antibodies relating thereto, and related systems, methods, compositions, and the like, such as diagnostics and medicaments. Where antibodies against a given GPCR are not known, the present invention provides such antibodies, and preferred antigenic sequences for producing such antibodies. Where antibodies against a given GPCR are known, the present invention provides preferred antigenic peptides for producing antibodies that exhibit improved specificity, affinity or capacity to perform antibody-related actions relative to the known antibodies.

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INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/50107

A. CLASSIFICATION OF SUBJECT MATTER

IPC 7 C12N15/12 C07K14/705 C07K16/28 G01N33/53

According to International Patent Classification (IPC) or to both national classification and IPC

B. FIELDS SEARCHED

Minimum documentation searched (classification system followed by classification symbols)

IPC 7 C07K C12N G01N

Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched

Electronic data base consulted during the international search (name of data base and, where practical, search terms used)

EMBL, SEQUENCE SEARCH, EPO-Internal, WPI Data, BIOSIS, MEDLINE

C. DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	ZHOU FENG C ET AL: "Production and characterization of an anti-serotonin 1A receptor antibody which detects functional 5-HT1A binding sites." MOLECULAR BRAIN RESEARCH, vol. 69, no. 2, 8 June 1999 (1999-06-08), pages 186-201, XP002222431 ISSN: 0169-328X figure 1; table 1 --- -/--	1-10, 15-26

☒ Further documents are listed in the continuation of box C.☐ Patent family members are listed in annex.

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Date of the actual completion of the international search

6 January 2003

Date of mailing of the international search report

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Bucka, A

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International Application No
PL 17-US 01/50107

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
X	<p>RAYMOND JOHN R ET AL: "Immunohistochemical mapping of cellular and subcellular distribution of 5-HT-1A receptors in rat and human kidneys." AMERICAN JOURNAL OF PHYSIOLOGY, vol. 264, no. 1 PART 2, 1993, pages F9-F19, XP001127496 ISSN: 0002-9513 the whole document, in particular figures 1, 3</p>	1-10, 15-26
Y	<p>--- VERDOT L ET AL: "PRODUCTION OF ANTI-PEPTIDE ANTIBODIES DIRECTED AGAINST THE FIRST AND THE SECOND EXTRACELLULAR LOOP OF THE HUMAN SEROTONIN 5-HT1A RECEPTOR" BIOCHIMIE, MASSON, PARIS, FR, vol. 76, no. 1, 1994, pages 165-170, XP008009332 ISSN: 0300-9084 the whole document</p>	1-10, 15-26
Y	<p>--- TODD E ANTHONY AND EFRAIAN C AZMITIA: "Molecular characterization of antipeptide antibodies against the 5-HT1A receptor: Evidence for state-dependent antibody binding." MOLECULAR BRAIN RESEARCH, vol. 50, no. 1-2, 15 October 1997 (1997-10-15), pages 277-284, XP002222432 ISSN: 0169-328X the whole document</p>	1-10, 15-26
A	<p>--- ECKARD C P ET AL: "CHARACTERISATION OF G-PROTEIN-COUPLED RECEPTORS BY ANTIBODIES" CURRENT MEDICINAL CHEMISTRY, BENTHAM SCIENCE PUBLISHERS BV, BE, vol. 7, no. 9, September 2000 (2000-09), pages 897-910, XP000984970 ISSN: 0929-8673 the whole document</p>	1-10, 15-26
A	<p>--- BACKSTROM JON R ET AL: "Generation of anti-peptide antibodies against serotonin 5-HT2A and 5-HT2C receptors." JOURNAL OF NEUROSCIENCE METHODS, vol. 77, no. 1, 7 November 1997 (1997-11-07), pages 109-117, XP002222433 ISSN: 0165-0270 the whole document</p> <p>--- -/--</p>	1-10, 15-26

INTERNATIONAL SEARCH REPORT

International Application No

PCT/US 01/50107

C.(Continuation) DOCUMENTS CONSIDERED TO BE RELEVANT

Category *	Citation of document, with indication, where appropriate, of the relevant passages	Relevant to claim No.
A	<p>EASON MARGARET G ET AL: "Identification of a G-s coupling domain in the amino terminus of the third intracellular loop of the alpha-2A-adrenergic receptor: Evidence for distinct structural determinants that confer G-s versus G-i coupling."</p> <p>JOURNAL OF BIOLOGICAL CHEMISTRY, vol. 270, no. 42, 1995, pages 24753-24760, XP002222434 ISSN: 0021-9258 the whole document</p> <p>-----</p>	1-10, 15-26

INTERNATIONAL SEARCH REPORT

national application No.
PCT/US 01/50107

Box I Observations where certain claims were found unsearchable (Continuation of item 1 of first sheet)

This International Search Report has not been established in respect of certain claims under Article 17(2)(a) for the following reasons:

1. ☒ Claims Nos.:
because they relate to subject matter not required to be searched by this Authority, namely:
Although claims 19 and 20 are directed to a diagnostic method practised on the human/animal body, the search has been carried out and based on the alleged effects of the compound/composition.
2. ☐ Claims Nos.:
because they relate to parts of the International Application that do not comply with the prescribed requirements to such an extent that no meaningful International Search can be carried out, specifically:
3. ☐ Claims Nos.:
because they are dependent claims and are not drafted in accordance with the second and third sentences of Rule 6.4(a).

Box II Observations where unity of invention is lacking (Continuation of item 2 of first sheet)

This International Searching Authority found multiple inventions in this international application, as follows:

see additional sheet

1. ☐ As all required additional search fees were timely paid by the applicant, this International Search Report covers all searchable claims.
2. ☐ As all searchable claims could be searched without effort justifying an additional fee, this Authority did not invite payment of any additional fee.
3. ☐ As only some of the required additional search fees were timely paid by the applicant, this International Search Report covers only those claims for which fees were paid, specifically claims Nos.:
4. ☒ No required additional search fees were timely paid by the applicant. Consequently, this International Search Report is restricted to the invention first mentioned in the claims; it is covered by claims Nos.:
1-10, 15-26 (all partially)

Remark on Protest

- ☐ The additional search fees were accompanied by the applicant's protest.
- ☐ No protest accompanied the payment of additional search fees.

FURTHER INFORMATION CONTINUED FROM PCT/ISA/ 210

This International Searching Authority found multiple (groups of) inventions in this international application, as follows:

Invention 1: claims 1-10, 15-26, all partially

an isolated antigenic peptide having the amino acid sequence SEQ ID NO: 692, nucleic acids encoding said peptide, antibodies directed against said peptide, kits containing said antibodies

Inventions 2 to 1600: claims 1-26,
all partially and in so far as applicable

each separate, individual invention relates to an isolated antigenic peptide, nucleic acids encoding said peptide, antibodies directed against said peptide, kits containing said antibodies,
wherein invention 2 is represented by the peptide having the amino acid sequence SEQ ID NO: 693,
invention 3 is represented by the peptide having the amino acid sequence SEQ ID NO: 694,
continuing to invention 1600, which is represented by the peptide having the amino acid sequence SEQ ID NO: 2292

Invention 1601: claims 27-66

a method of identifying an amino acid sequence of an antigenic peptide derived from a candidate polypeptide, peptides identified by that method, antibodies directed against said peptides

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